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MEDICINE & HISTORY

Series V Volume XIV No. 2 JUNE 1992

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With this issue of *Transactions & Studies,* the venerable journal suspends its quarterly publication in favor of a more modest frequency. Henceforth, it will appear at least once annually.

Such a rearrangement must strike the historicist with particular irony since the journal's putative bicentennial anniversary is just around the corner in 1993. Of course any publication devoted largely to history would be obliged to point out that 2042 would be a less sentimental and more accurate bicentenary. After the initial issue published in 1793, there was a small gap of one-half century before the appearance of the second issue. At times in its past, *Transactions & Studies* has been published once, twice, and thrice annually. Some years, it has not appeared. In 1987, there was a single number celebrating the College's bicentennial. Readers have questioned its utility but never its tenacity.

In April 1992, the Council of the College approved a recommendation to reduce its frequency in order to allow the College to concentrate its resources on programs that, in the Council's estimation, possess higher priority. Most of us hate spending in general, but love it in particular — that is, when funds are spent on things we like. To the loyal readership of *Transactions & Studies,* we express our hopes that you will be able to accommodate fewer presentations in the knowledge that this action has permitted the College to project balanced budgets into the future and to reinvest a larger portion of its endowment income back into principal in order to enhance the institution's long-term strength.

To past editors of *Transactions & Studies,* we wish to share the knowledge that this decision has been made more difficult due to your productive labors to maintain and enhance the journal's relevance and attractiveness. And especially since this ultimately beneficial action has caused us to lose the services of *Transactions & Studies*'s current editor, we offer Dr. Caroline Hannaway our deep appreciation and very best wishes.

Subsequent issues will carry the proceedings of College sponsored conferences and other material of particular note. Should need and capacity dictate, there is nothing to preclude an eventual return to a quarterly format.

John M. O'Donnell, Ph.D.
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The Demand for Medical Education in New York after World War II

WILLIAM G. ROTHSTEIN

Reflecting on the study of medical schools in the half century since World War II, one finds that medical schools have increasingly been described as sanctified places combining elements of religious shrines, theological seminaries, and the creation of the world as depicted in the book of Genesis. Faculty physicians dedicate themselves to healing the sick, medical students are learning their calling, and researchers are performing daily miracles in the laboratory and clinic.

Were it not for the aura of modern medicine, observers would describe the recent history of medical schools very differently. They would be amazed by the growth in medical school budgets, personnel, students, residents, and physical plants, as well as by their burgeoning patient care and research functions. In short, they would treat medical schools as social and economic enterprises.[1]

I propose to use a socio-economic perspective in this paper to examine one aspect of medical schools after World War II. Medical education has been a commodity in great demand. Many more students have wanted a medical education than could be admitted to medical school. When a similar imbalance developed in the nineteenth century, it produced an increase in the number and size of medical schools. Today, the cost of opening or expanding a medical school is so great that the marketplace cannot meet the increased demand. How, then, has the imbalance between supply and demand for places in medical schools been resolved?

I have chosen New York City for an examination of this issue primarily because it has long been the leading center of medical education in the nation and its medical schools have been the subject of considerable research. In addition, New York State has always

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This is a revised form of a paper presented at the College of Physicians of Philadelphia on 17 April 1991 as the Kate Hurd Mead Lecture of the Medical College of Pennsylvania and the Section on Medical History of the College of Physicians of Philadelphia.

1. For an analysis of the history of medical education from this perspective, see William G. Rothstein, *American Medical Schools and the Practice of Medicine: A History* (New York: Oxford University Press, 1987).

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been among the states with the largest number of physicians per capita, so its medical school policies have never been driven by a need to redress a severe shortage of physicians.

New York City is also a prototype for all American cities. This is not to say that what happens in New York City always happens elsewhere, but rather that practically everything that has occurred in cities elsewhere also has occurred in New York City. As a pertinent example, Philadelphia's current fiscal crisis is occurring 15 years after a very similar one in New York City, which has served as a national model.

The Evolution of Medical Schools in New York City

During the nineteenth century, New York City was one of several regional centers of medical education. Before the Civil War, it was far behind Philadelphia, which attracted many medical students from the southern states. After the Civil War, New York City became the nation's largest center of medical education, but only because it served the nation's most populous region.

New York City became the leading center of American medical education early in the twentieth century because of its hospitals, not its medical schools. The city's municipal hospital system, the largest in the nation, and its outstanding voluntary hospitals made it America's premier center for graduate medical education. From 1920 to midcentury, almost one out of every six interns in the nation studied in hospitals in New York City. Many aspiring specialists did so too as hospital experience became essential for a career in a specialty.[2]

New York State medical schools became the nation's major source of medical education after 1920. By 1950, the city's five medical schools educated over 8 percent of all medical students in the United States and the four upstate schools taught another 4 percent, a considerably higher percentage than that of any other state.[3] Three private New York City medical schools located in Manhattan were nationally recognized: at Columbia, Cornell, and

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2. The state of graduate medical education in New York City in the first third of the twentieth century is described in Jean Curran, *Internships and Residencies in New York City, 1934–1937* (New York: Commonwealth Fund, 1938).

3. These and other statistics in the paper presented without references have been analyzed by the author using data in the annual medical education issues of the *Journal of the American Medical Association.*

New York University. The other two, the New York Medical College, also in Manhattan, and the Long Island College of Medicine, in Brooklyn, lacked university affiliations and were undistinguished academically and in continual financial difficulty. The Rockefeller Institute was a great center of medical research, but it contributed almost nothing to local medical education. The upstate medical schools were located at private universities in Albany, Rochester, Syracuse, and Buffalo.

New York State, like most northeastern states, had no public medical school and gave no public aid to its private medical schools. New York City did have long-standing affiliation agreements between some local medical schools and municipal hospitals, most notably Bellevue Hospital, but no funding was involved.

The Demand for Medical Education in New York City

The most striking aspect of medical education in New York since the mid-twentieth century has been the extraordinary level of demand for it. Using state-level data between 1960 to 1987, I have calculated that New York State has ranked either first or second in the nation in the per capita number of entering medical students in all United States medical schools, and in 1950 it ranked sixth. This understates the demand for medical education in New York, because New York State also sends more students to foreign medical schools than any other state.[4]

One possible explanation for this remarkable level of demand is the large number of New York medical schools, because my analyses have shown that the best single predictor of the per capita number of a state's residents who attend medical school appears to be the per capita number of places in medical schools in the state. However, since 1950, I found that more than 30 percent of the residents of New York State who enrolled in United States medical schools have attended schools in other states. By contrast, other states with medical schools that rank high on per capita attendance at medical school usually send less than 15 percent of their students to medical schools in other states.

Another obvious factor is personal income, because New York is a wealthy state. But some wealthy states, like California, do not

4. For a discussion of American graduates of foreign medical schools in New York, see Barry Stimmel, "Medical Education and the Regents of the State of New York," *New England Journal of Medicine,* 5 March 1981, *304*:602–607.

rank very high in the number of medical students per capita, while some less wealthy states, like Nebraska and Louisiana, rank at or near the top. My statistical analyses show that state per capita income is a poor predictor of state per capita number of residents attending medical school. The median educational level of a state's population is equally deficient as an explanatory factor at this level of analysis.

If the remarkable demand for medical education in New York cannot be explained by its per capita income, educational attainment, and number of medical school places, an obvious alternative is cultural factors, which are known to influence occupational choice.

The most likely explanation for the extraordinary popularity of medical education in New York is its large Jewish population. American Jews have long been over-represented in the medical profession. In 1939, Morris Fishbein, editor of the *Journal of the American Medical Association,* estimated that between 15 and 20 percent of American physicians were Jews, while Jews constituted only 3.5 percent of the total United States population. In 1945 it was estimated that between one-third and one-half of all applicants to medical school nationwide were Jewish. Surveys in 1950 and 1952 of New York state residents who applied to medical school found that 42 percent of the 1950 applicants and 50 percent of the 1952 applicants were Jews, while Jews comprised only 16 percent of the state's population.[5] The high level of demand of New York State Jews for access to medical education has profoundly affected all aspects of the state's programs for medical education.

Patterns of Discrimination in New York Medical Schools

Discrimination against members of religious or ethnic groups, as opposed to discrimination against blacks and women, does not appear to have been a significant problem in nineteenth-century American medical schools. However, this situation changed dramatically about 1920 as more children of immigrants sought college and medical education.

Before analyzing this development, I shall describe opportunities for blacks and women in the first half of the twentieth century

5. Frank Kingdon, "Discrimination in Medical Colleges," *American Mercury,* 1945, *61*:392 and 397–398; Howard Wilson, *A Study of Policies, Procedures, and Practices in Admissions to Medical Schools in New York State* (n.p.: 1953), p. 12.

as a basis for comparison. Until after mid-century, state or medical school policies of racial discrimination prevented blacks from attending almost all medical schools in the southern states, where the large majority of blacks lived. In the north, some medical schools discriminated against blacks, but many others admitted black students and some actively sought them. A major reason for the low black enrollments in New York State medical schools was the small number of blacks who applied to them. In 1952, blacks constituted 6 percent of the population of New York State, but only 2 percent of the applicants to the state's medical schools. Discrimination was an overwhelming problem for black medical school graduates seeking internships. The number of internship places available to blacks nationwide rarely exceeded the number of black medical school graduates.[6]

Before the 1960s only 5 percent of all medical students in the United States were women. National studies beginning in 1927 found that almost identical proportions of men and women applicants were admitted to medical school every year, indicating the absence of discrimination at this level. Many internship programs did not accept women, but the small number of women graduates meant that they had little difficulty finding satisfactory internship positions.[7]

In contrast to blacks and women, after World War I the male children of recent immigrants, especially Jews and Catholics of Italian descent, began to experience widespread discrimination in higher education generally and by medical schools specifically. The situation from the perspective of the colleges is described in a 1933 history of New York University by Theodore Jones:

> More than ever, in 1919, the newer social strata in New York City were pressing for admission to the professional schools, and to the colleges which prepared for them . . . .
>
> [T]he majority of the faculty agreed, wisely or unwisely, with the majority of Americans, that "Americanism" was a

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6. Herbert M. Morais, *The History of the Negro in Medicine* (New York: Publishers Co., 1967); Wilson, *Study of the Policies, Procedures, and Practices,* p. 12.

7. Judith B. Braslow and Marilyn Heins, "Women in Medical Education: A Decade of Change," *New England Journal of Medicine,* 1981, *304*:1130; Burton D. Myers, "Report on Applications for Matriculation in Schools of Medicine of the United States and Canada, 1929–1930," *Journal of the Association of American Medical Colleges,* March 1930, *5*:87– 88; Curran, *Internships and Residencies in New York City, 1934–1937,* p. 101.

> quality that the student body of the University College had once possessed, was in danger of losing, and must recover . . . . [T]he University College was being swamped in 1919 by an invasion of students of what, to the older American student and teacher, seemed wholly alien habits and manners . . . . [F]or every "alien" student who entered, an "American" student disappeared, and . . . the College would soon be wholly "alien." If that occurred, how could "Americanism" be taught with no "American" students to serve as examples to the "aliens"? . . . Such were the questions which agitated, not only the faculty of the University College, but those of many similar colleges after 1919.[8]

Medical schools shared this view and began to limit the number of students from recent immigrant families, especially from Jewish families. The dean of the Cornell Medical College observed in 1940: "Cornell Medical College admits a class of eighty each fall. It picks these men from about twelve hundred applicants of whom seven hundred or more are Jews. We limit the number of Jews admitted to each class to roughly the proportion of Jews in the population in this State, which is a higher proportion than any other part of the country. That means that we take in from 10-15% Jews." It also meant that Cornell admitted 1 out of 7 non-Jewish applicants and 1 out of 70 Jewish applicants. The other New York City medical schools admitted a higher proportion of Jewish applicants, but their proportions of Jewish students declined sharply during the 1920s and 1930s. Italian Catholics were also the subject of systematic discrimination.[9]

It should not be thought that medical school discrimination against Jews occurred only in New York. In 1939, Fishbein wrote in the *Journal of the American Medical Association*: "The case of the Jewish boys in medicine is particularly serious because they have overwhelmed the schools, and many schools turn them down simply because they are Jewish. There is no way to prove this, but it is obvious."[10]

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8. Theodore F. Jones, ed., *New York University: 1832– 1932* (New York: New York University Press, 1933), pp. 233– 235.

9. For general discussions of discrimination against Jews by medical schools and universities, see Dan A. Oren, *Joining the Club: A History of Jews and Yale* (New Haven, Conn.: Yale University Press, 1985); Marcia G. Synnott, *The Half-Opened Door* (Westport, Conn.: Greenwood Press, 1979); Harold S. Wechsler, *The Qualified Student: A History of Selective College Admission in America* (New York: Wiley, 1977). The quotation is from Lawrence Bloomgarden, "Medical School Quotas and National Health," *Commentary,* 1953, *15*:32.

10. Kingdon, "Discrimination in Medical Colleges," pp. 397–398.

After World War II, two developments in New York led government to address the problem of educational discrimination. One was the election to political office of members of recent immigrant groups. The most famous of these elected officials was New York City Mayor Fiorello LaGuardia, whose father was an Italian Protestant and whose mother was Jewish. The second development was the large number of World War II veterans who wanted to attend medical school and were eligible for financial aid from the GI Bill, which was enacted by Congress in 1944 to provide educational benefits for veterans of World War II. Veterans seeking admission to medical school swelled the total number of applications for about 6,000 United States medical school places from 36,000 before World War II to 73,000 in 1947. The number of applications to New York City medical schools increased from 7,000 to 11,000 over the same period with practically no increase in the size of the entering classes.[11]

Pressed by their constituents, New York City politicians began a vigorous attack on the discriminatory practices of local medical schools in 1945. These attacks and evidence of discrimination in the upstate medical colleges and in many of the state's liberal arts colleges and universities culminated in a 1948 New York State law that required nonsectarian educational institutions to admit students "without regard to race, color, religion, creed, or national origin."[12]

Legislation did not change the situation immediately, because studies carried out in 1950 and again in 1952 found continuing evidence of discrimination against Jews in all New York State medical schools except New York University and the two new public medical schools (discussed below), as well as in many liberal arts colleges. It also found that Catholics of Italian origin were less likely to be admitted to medical school than equally qualified non-Italian Catholics.[13]

Although space does not permit a detailed discussion, discrimination against Jews and Italian Catholics also occurred in hospital internship and residency programs and hospital staff and medical

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11. David S. Berkowitz, *Inequality of Opportunity in Higher Education: A Study of Minority Group and Related Barriers to College Admission* (Albany, N.Y.: 1948), pp. 55–56. Because most applicants apply to several medical schools, the total number of applications exceeds the number of applicants.

12. Wilson, *Study of Policies, Procedures, and Practices,* p. 3.

13. Ibid.

school faculty appointments.[14] The medical staffs of many voluntary hospitals were composed largely of native born Protestant physicians, who saw the newcomers as upsetting long-established patterns of patient referrals and sponsorship of favored younger physicians by older staff members. Indeed, Jewish hospitals flourished because discrimination against Jews by other hospitals enabled them to recruit the best Jewish house staff and attending physicians.

Increasing the Supply of Medical School Places

While New York State was confronting the discriminatory admissions policies of the state's medical schools in the late 1940s, two other problems emerged. One was that the supply of physicians in New York was not keeping pace with the growth in the population. A second, brought dramatically into focus by the demands of veterans for access to higher education, was that the state's facilities for higher education generally and medical education specifically were inadequate to meet present and future demand. Thus there were now three sources of pressure on the state relating to medical education: groups seeking nondiscriminatory admissions policies by medical schools; communities seeking more physicians; and students seeking the overall expansion of medical school enrollments. The medical schools, on the other hand, resisted all pressures for changes.

The state government responded by reorganizing public higher education. In 1948, the legislature created the State University of New York (SUNY), which was empowered both to build new public institutions of higher education and to convert private institutions into public ones.[15] The legislation called for, among other things, one upstate and one downstate public medical school. Three private medical schools, Albany, Syracuse, and Buffalo, vied to become the SUNY upstate school, with the choice going to Syracuse because of its central location and university affiliation. Later Buffalo became another SUNY medical school and Albany a recipient of large-scale public funding.

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14. For an analysis of ethnic factors in internship and staff appointments to community hospitals, see Oswald Hall, "The Stages of a Medical Career," *American Journal of Sociology,* 1948, *53*:327–336.

15. This and the following discussion is based on Stanley W. Olson, "State Support of Medical Education in New York," *Journal of the Association of American Medical Colleges,* March 1950, 25:129–137.

The location of the SUNY downstate medical school was more controversial. Long Island and Westchester County were excluded as locations because of insufficient clinical facilities, although in the early 1970s Long Island received both a private osteopathic school and a new public medical school at the SUNY campus at Stony Brook. Political leaders in the Bronx and Queens each vied to have their borough be the site for a new medical school, claiming that Manhattan and Brooklyn already had medical schools. The final decision in 1950 was to convert the Long Island College of Medicine in Brooklyn into the downstate school, because it could be expanded quickly and was in dire financial condition. As the SUNY Downstate Medical Center, College of Medicine (now the SUNY Health Sciences Center) at Brooklyn, it soon had the largest enrollment of any medical school in the state.[16]

Meanwhile, some Jewish leaders in New York remained unconvinced that discrimination would disappear for Jewish medical students, interns, residents, and medical school faculty members, even with these new state initiatives. These leaders, often older physicians and laymen who had experienced discrimination in their youth, began a successful campaign to build a Jewish medical school in New York City at Yeshiva University that would have non-discriminatory admissions policies — at which, they said, Jews would be the hosts, not the guests.[17]

Perhaps the most striking aspect of this proposal for a Jewish medical school was the widespread support it received across the political spectrum. New York City politicians supported it because it was good politics and would provide a medical school affiliation for a major new municipal hospital to be built in the Bronx next to the new medical school. Governor Thomas Dewey and later President Dwight Eisenhower supported it as an example of voluntary action that reduced the need for government programs. Some supporters also may have favored it as a convenient way to avoid government intervention to resolve the problems of discrimination.

On the other hand, not all New York Jews were strong supporters of the Albert Einstein College of Medicine, as it was named

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16. This information was obtained from issues of the *New York Times* during the period.

17. For accounts of these issues, see Jeffrey S. Gurock, *The Men and Women of Yeshiva* (New York: Columbia University Press, 1988); Dorothy Levenson, *Montefiore: The Hospital as Social Instrument, 1884–1984* (New York: Farrar, Straus and Giroux, 1984).

when it opened in 1955. Many wanted integration of existing schools rather than the development of separate Jewish ones. New York also had several powerful and ambitious Jewish hospitals that did not want a competitor for interns, residents, and physicians.

During the next decade discrimination against Jews and other recently arrived ethnic groups waned, as demonstrated by the establishment of the second Jewish medical school in New York City. Around 1960, Mount Sinai Hospital, one of the city's largest and strongest hospitals, proposed to establish a medical school. The hospital claimed that it was no longer able to attract the Jewish interns, residents, and physicians who previously had nowhere else to go. As one of the largest recipients of biomedical research grants in the nation, Mount Sinai Hospital was also concerned that it would lose researchers to the faculties of medical schools.[18]

The reaction of the New York community to the proposed second Jewish medical school was much more muted than that given the Einstein school. The second school had considerable difficulty obtaining a university affiliation. The federal government, not the state or local government, was the major source of external funding. Mount Sinai medical school, which opened in 1968, only 13 years after Einstein, was just another medical school in an era of subsiding religious discrimination.

Although discrimination lessened, the problem of access of some other groups to medical school increased. In 1973 the City University of New York (CUNY) opened the Sophie Davis School of Biomedical Education to increase the number of physicians, especially primary care physicians, who were blacks, Hispanics, and members of other traditionally under-represented minority groups. The school offered a six- or seven-year program that combined undergraduate college education and medical school training, with the two clinical years of medical school being taken at any of several four-year medical schools in the state that were affiliated with the Sophie Davis school.[19]

The Sophie Davis school was immediately entangled in a controversy over its admissions policies. In 1976 a federal court ruled

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18. A history can be found in George James, "Mount Sinai School of Medicine of the City of New York," in *Case Histories of Ten New Medical Schools,* ed. Vernon W. Lippard and Elizabeth F. Purcell (New York: Josiah Macy, Jr. Foundation, 1972), pp. 209–239.

19. The author knows of no history of this institution. See Edward B. Fiske, "City College Trains Inner-City Doctors," *New York Times,* 12 March 1978, pp. 1:4ff.

that it had discriminated against non-minorities, despite the school's assertion that it had altered its admissions policies. The school currently claims that one-fourth of its students have "minority" backgrounds. In 1984, New York State formally agreed to make it a four-year medical school with clinical facilities in Queens, but no funding has ever been provided to construct the clinical facilities.

The next step in the process of increasing the ties between medical schools and specific groups occurred in 1978, when the Roman Catholic Archdiocese of New York purchased the New York Medical College by assuming responsibility for $10 million of the college's debt, which had threatened to bankrupt it. The Archdiocese, which includes Manhattan, the Bronx, Staten Island, and eight counties upstate, stated that the school would provide medical staff for the Archdiocese's 14 hospitals. This decision is difficult to understand because other archdioceses have obtained medical staffs for their hospitals simply by affiliating with medical schools, at much less expense and risk. Furthermore, many of the students and faculty members of the New York Medical College were Jewish. The college was relocated to Valhalla, in Westchester County, but its main hospital affiliations remain in New York City.[20]

The New York Archdiocese has since been involved in a steady stream of controversy over its relations with its medical college. The Archdiocese has repeatedly claimed that it does not plan to make the college formally Catholic, which would deprive it of several million dollars in state appropriations annually. At the same time, it has tried periodically to tighten its control over the college.

The most persistent source of controversy has been the insistence of the archdiocese that abortions not be performed at the college's affiliated hospitals, including its New York municipal hospitals that are a major source of revenue and patients. The city has resolved the problem by employing other physicians to perform abortions at the municipal hospitals affiliated with the New York Medical College. This means that the college continues to be affiliated with hospitals that perform abortions.

Thus, in the years since World War II, New York City has gone from five private nonsectarian medical schools to two Jewish medical schools (Albert Einstein and Mount Sinai), one Catholic

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20. The author knows of no satisfactory account of the recent history of the New York Medical College. This account has been drawn from issues of the *New York Times*.

medical school (New York Medical College), two public medical schools (SUNY at Stony Brook and SUNY at Brooklyn), three private nonsectarian medical schools (at Columbia, Cornell, and New York Universities), one osteopathic medical school (New York College of Osteopathic Medicine in Old Westbury), and one public preclinical medical school with a mission of training traditionally under-represented minority groups (the Sophie Davis School of Biomedical Education at CUNY). Even though three of these schools have campuses located in the suburbs of New York City, I consider them all to be New York City medical schools because they all use city hospitals for their clinical teaching.

New York State and Medical Education

Given the prodigious demand for medical education in New York State, even the additional places provided by the new medical schools did not suffice. An obvious step was to expand the existing private medical schools. In 1967, the state contracted with these schools to subsidize enrollment increases up to a maximum of 25 students per school and to provide matching capital funds for the expansion of facilities. Another program begun in 1970 provided $1,500 initially and a larger amount subsequently to private medical schools for each student enrolled in an M.D. program. A third state program, started in 1969, (known as "Bundy grants") was designed to strengthen all private higher education and provided per capita aid to all nonsectarian private colleges and universities, including medical schools. The state also gave private medical schools substantial grants for the construction of facilities during this period.[21]

The demand for medical education was not satisfied even by these programs. The state then began to subsidize out-of-state medical schools that enrolled New York medical students. In 1975, New York State contracted with the University of Vermont medical school to admit about 10 New York students per year. The students were expected to come from New York's northern tier, which had no medical school. They paid full out-of-state tuition in Vermont, and New York State made a per capita payment to the Vermont medical school, which already had similar arrangements with

21. Regents Task Force on Medical School Enrollment and Physician Manpower, *Report of the Regents Task Force on Medical School Enrollment and Physician Manpower to the Regents of the University of the State of New York* (Albany, N.Y.: 1975), pp. 162–166.

Maine, Massachusetts, and Rhode Island, none of which then had public medical schools.[22]

This program, which seemed innocuous enough, was soon seized on by some "Jewish mothers on Long Island," according to an informant, and was extended to the Sackler medical school in Tel Aviv, Israel. Within a few years, about one hundred New York students were attending the Israeli medical school under a similar arrangement. In short order, black politicians got similar privileges for New York students attending Meharry Medical College in Nashville, Tennessee, and Morehouse School of Medicine in Atlanta, Georgia, and the Puerto Rican lobby did the same for the University of Puerto Rico. In 1988, 39 New York students were attending the two predominantly black schools, but no student ever went to Puerto Rico. The program was still in operation as of 1991 except in Vermont, which withdrew from it in 1989.

New Yorkers are individualistic and self-reliant citizens. They do not put all their faith in government. While New York state was busy expanding opportunities for medical education for its citizens, some of New York's aspiring medical students were attending foreign medical schools. In the 1960s and early 1970s, New Yorkers, like other Americans, went to European medical schools, as they had before World War II, but European nations soon restricted the admission of Americans.[23]

Proprietary medical schools in Mexico and the Caribbean arose to fill the breach. A few, especially in Mexico, were well established medical schools that succumbed to the lure of the dollar. Most of the Caribbean schools had their administrative offices in the United States and catered to American citizens. Many of the students attending these schools were New Yorkers, according to estimates in the late 1970s based on the number of American medical students attending foreign medical schools who sought admission to programs that would enable them to complete their medical training in the United States These data suggest that between 25 and 50 percent of American students attending foreign proprietary medical schools were from New York State.[24]

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22. No detailed account of this program exists, but major aspects, including the data below, are described in New York State Council on Graduate Medical Education, *Second Annual Report, 1989* (New York: 1989), pp. 17, 24, and 26.

23. This and the following are based on New York State Commission on Graduate Medical Education, *Report* (Albany, N.Y.: 1986), pp. 18–19.

24. Stimmel, "Medical Education and the Regents," p. 603; Regents Task Force on Medical School Enrollment and Physician Manpower, *Report,* p. 28.

Unfortunately for students attending foreign proprietary medical schools, their educational programs are not considered satisfactory by United States medical licensing authorities. This has been demonstrated repeatedly by the high failure rates on medical licensing and comparable examinations of United States citizens who have attended foreign medical schools.[25]

A number of mechanisms have been in place for years to enable Americans studying medicine abroad to return to the United States and complete their medical education in a manner acceptable to licensing authorities. Students may transfer to American medical schools to complete their education or take examinations that permit them to enter United States residency programs. Since 1974 New York State has provided $3,500 per student per year to New York medical schools that accept qualified United States medical students transferring from foreign medical schools, compared to the $2,000 given for regular medical students under the programs described above.

In 1980, the New York State Board of Regents expanded the opportunities for New Yorkers attending foreign medical schools to complete their medical education in New York. It decided to accredit those foreign medical schools that responded to a questionnaire in an acceptable manner and to allow their United States medical students to take their two years of clinical training in New York hospitals which need *not* be under the direct supervision of a United States or foreign medical school. Successful completion of this program was considered legally equivalent in New York (although not necessarily in other states) to graduation from an American medical school.

These methods of accreditation and clinical training, which the Associated Medical Schools of New York State and the Association of American Medical Colleges called a step backward in educational standards, have not been widely used. Only two or three foreign medical schools have been accredited, and few students have been involved. This is due in part to declining American attendance at foreign medical schools in recent years, which can be attributed to the improved balance between supply and demand for places in American medical schools.

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25. Stimmel, "Medical Education and the Regents," p. 605.

Conclusion

I observed at the beginning of this paper that New York was a prototype for the nation. What occurred in New York illustrates a fundamental dichotomy in our national policy toward medical education. Should the goal of medical education be to provide opportunities for students to study medicine or should it be to supply the nation with an adequate number of qualified physicians? In an era when governments provide more funding per student for medical students than for any other type of student, this is a significant public concern.

The history of medicine in New York since mid century clearly indicates strong public support for the opportunity goal. But the pressures in this direction do not come from parents and students alone. Medical schools prefer large applicant pools and express dismay whenever the pools become too small, even though applicant quality may not decline. Large applicant pools create large numbers of rejected applicants, who put pressure on governments to provide opportunities for medical education for them.

Current financial exigencies in New York suggest the likelihood of changes. Governor Mario Cuomo has convinced the state legislature to reduce state aid to private medical schools and other private colleges and universities and worked for the elimination of all subsidized education in out-of-state medical schools.

Do the changes represent a temporary response to financial exigencies or a new policy toward medical education that will have national implications? The evidence from New York suggests that no American state will ever follow the pattern of some northern European countries that admit fewer than one-fourth of their medical school applicants to medical school. Yet current levels of funding are unlikely to continue in an era of fiscal restraint and in the absence of a perceived shortage of physicians. It seems likely that a new balance between supply and demand for medical education will be struck in the next decade. Even the most indefatigable prognosticator, however, would hesitate to predict the outcome or its consequences.

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Caring for the Constitution: Medical Planning in Revolutionary France

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Correlating revolutionary development in medicine and political and social revolution in France has not been hard to do. French medicine of the early nineteenth century has been hailed for pointing medicine in a new direction; for becoming a world leader in its focus on the primacy of clinical and pathological experience obtained in the hospital, the key institution in the generation of medical knowledge. This medical leadership and innovation came in the period after political revolution had abolished the monarchy and restructured the French state. The changes in teaching and in structuring of the profession that followed the Revolutionary dissolution of the organizations and groups that had characterized medicine in Ancien Régime France look like significant elements in the new blossoming of medicine. Thus medical and social revolution have been linked.

Not everyone has assented to the proposition that the impetus for the new medicine of the Paris clinic is consequent upon the revolutionary shakeup. Foucault has argued that a new way of seeing, of perceiving, a new relation between the visible and the invisible, was of most consequence in medical change.[1] But whether one finds his interpretation more compelling or whether one inclines to Ackerknecht's view of "hospital" medicine as arising out of political revolution and technological innovation,[2] the expression of a need for reform in medicine was widespread in France in the Revolutionary period and indeed had been for several decades before that.

The French literature of the latter eighteenth century and early years of the Revolution is studded with discourses whose titles

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1. Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception,* trans. by A. Sheridan Smith (New York: Pantheon Books, 1973).

2. Erwin H. Ackerknecht, *Medicine at the Paris Hospital, 1794–1848* (Baltimore, Md.: Johns Hopkins University Press, 1967), esp. chaps. 1–3.

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suggest that their authors believe there was room for improvement. To cite the titles of a few examples: Jean Gallot, *Vues générales sur la restauration de l'art de guérir* (1790); Jean Emmanuel Gilibert, *L'Anarchie médicinale, ou la médecine considérée comme nuisible à la société* (1772); Jean Jacques Menuret de Chambaud, *Essais sur les moyens de former de bons médecins, sur les obligations réciproques de médecins et de la société* (1791); Claude Nicolas Le Cat, *Lettre . . . sur les avantages de la réunion du titre de docteur en médecine, avec celui de maître en chirurgie et sur quelques abus dans l'un et l'autre art* (1766); Nicolas Chambon de Montaux, *Moyens de rendre les hôpitaux plus utiles à la nation* (1787); and Joseph Michel Dulaurens *Essai sur les établissemens nécessaires et les moins dispendieux, pour rendre le service des malades dans les hôpitaux vraiment utiles à l'humanité* (1787). The issues raised in these essays range widely over a number of subjects including lack of progress in the acquisition of medical knowledge, the problems with the tripartite division of the profession, especially the division between physicians and surgeons, the defects of medical education with its lack of clinical experience, the inequitable distribution of medical services, particularly between town and countryside, and the inadequacies of hospitals both in providing care and in serving as locations for teaching. Dissatisfaction, it is fair to say, was felt on a wide variety of fronts.

Nor, it should be noted, were these just paper polemics. Eighteenth-century French medicine was by no means static either in the structure of the profession or in the organization and characteristics of the institutions with which practitioners were associated. The topics discussed in reforming tracts in many instances are a response to changes and initiatives already underway. For example, both surgeons and apothecaries were seeking an upgrading and redefinition of their professional functions.[3] Hospital reform, most notably

3. For the surgeons, see Toby Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Sciences and Institutions in the Eighteenth Century* (Westport, Conn.: Greenwood Press, 1980); Toby Gelfand, "A 'Monarchical Profession' in the Old Regime: Surgeons, Ordinary Practitioners, and Medical Professionalization in Eighteenth-Century France," in *Professions and the French State, 1700–1900,* ed. Gerald L. Geison (Philadelphia, Pa.: University of Pennsylvania Press, 1984), pp. 149–180; Marie-José Imbault-Huart, "Les chirurgiens et l'esprit chirurgical en France au XVIIIe siècle," *Clio Medica,* 1981, *15*:143–157. For the apothecaries, see Charles Bedel, "L'enseignement des sciences pharmaceutiques," in *Enseignement et diffusion des sciences en France au XVIIIe siècle,* ed. René Taton (Paris: Hermann, 1964), pp. 237–258; Bénédicte Dehillerin and Jean-Pierre Goubert, "A la conquête du monopole pharmaceutique: Le Collège de Pharmacie de Paris, 1777– 1796," *Historical Reflections/Réflexions historiques,* 1982, *9*:233–248. The

of the Hôtel-Dieu in Paris, was a major concern of royal ministers, philanthropists, and learned scientists and practitioners in the 1780s.[4] And enlightened administrators of physiocratic outlook, keenly concerned about the improvement of the health and welfare of the population, had shown a receptivity to measures that seemed likely to assist such an outcome.[5]

Amongst this plethora of calls for reform, one contribution has come to stand out, especially in the retrospective assessment of medicine in Revolutionary France. This is not a short pamphlet like some of those listed above but a substantial discourse with the imposing title of *Nouveau Plan de Constitution pour la Médecine en France* (*New Plan of Constitution for Medicine in France*). Its subtitle explains its purpose further: *General Views on the Reform needed in Medicine, and on the Necessity of Returning it to the State of Unity and Simplicity it had in the Time of Hippocrates, by Reuniting it to Surgery.* The *New Plan* has gained fame as the blueprint for the teaching of medicine on new organizational principles embodied in the Ecoles de Santé established in 1794, the departure point for the restructuring of French medicine in the Republican era.[6] But, in fact, the *New Plan* is more often alluded to than studied in detail and certain of its recommendations have been given wide play while others are virtually ignored.[7] In this

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most recent more comprehensive work on French medicine in this period is Matthew Ramsey, *Professional and Popular Medicine in France, 1770–1830: The Social World of Medical Practice* (Cambridge: Cambridge University Press, 1988).

4. Louis S. Greenbaum, "Jean-Sylvain Bailly, the Baron de Breteuil and the 'Four New Hospitals' of Paris," *Clio Medica,* 1973, *8*:261–284; Greenbaum, "Tempest in the Academy: Jean-Baptiste Le Roy, the Paris Academy of Sciences, and the Project of a New Hôtel-Dieu," *Archives Internationales d'Histoire des Sciences,* 1974, *24*:122–140; Greenbaum, "Health Care and Hospital Building in Eighteenth-Century France: Reform Proposals of Du Pont de Nemours and Condorcet," *Studies on Voltaire and the Eighteenth Century,* 1976, *152*:895–930.

5. Caroline Hannaway, "The Société Royale de Médecine and Epidemics in the Ancien Régime," *Bulletin of the History of Medicine,* 1972, *46*:257–273; Camille Bloch, "L'assistance et l'état en France à la veille de la révolution," (Thesis, Paris, 1908); Shelby T. McCloy, *Government Assistance in Eighteenth-Century France* (Durham, N.C.: Duke University Press, 1946).

6. In its separately printed version, the *New Plan* is 201 pages long. Reprinted in the *Histoire de la Société Royale de Médecine* (1787 and 1788), the *New Plan* is 171 pages in length. Ackerknecht, *Medicine at the Paris Hospital,* p. 27.

7. For a discussion of aspects of the *New Plan,* see Dora Weiner, "Le droit de l'homme à la santé — une belle idée devant l'Assemblée constituante, 1790–1791," *Clio Medica,* 1970, *5*:209–225; Toby Gelfand, "A Clinical Ideal: Paris, 1789," *Bulletin of the History of Medicine,* 1977, *51*:397–411 and Gelfand, *Professionalizing Modern Medicine,* pp. 146–148 and 156–160; For references, see, for example, Ramsey, *Professional and Popular Medicine in France,* pp. 72–74; Laurence Brockliss, "L'enseignement médicale et la Révolution: essai de réévaluation," *Histoire de l'éducation,* May 1989, *42*:84.

paper I suggest that a closer look at the *New Plan* will provide insights into the perception by contemporaries of the medical make-up of France at the close of the Ancien Régime and assist in understanding the rhetoric and reality of medical planning in the first phase of the Revolution during the Constituent Assembly.

But before proceeding to an *explication de texte* some background on the circumstances which led to the appearance of this plan for a new constitution of medicine is in order. First, to outline the immediate context of its publication, the *New Plan* was a submission to the National or Constituent Assembly on 25 November 1790 by the Royal Society of Medicine of Paris, the group of physicians that had been making such a splash in the French medical world since 1776. The Constituent Assembly, the body charged with drawing up the French constitution, had decreed on 20 August 1790 that all learned societies of the Ancien Régime justify their activities and expenses. By its own account, the Royal Society had complied by submitting a new regulation for the internal governance of its affairs on 19 September 1790.[8] But it did not stop there. It then moved boldly to attain a key position in the debate over medicine already underway by offering in November its broad-ranging set of proposals for the reform of the teaching and practice of medicine in France. This was a project that it had been working on formally for at least a year. In August 1789, in the early days of the Revolution, perhaps inspired by a sense that significant change might be possible, perhaps motivated by a realization that reforming programs might be called for and receive a hearing, and likely concerned to keep abreast of the political tides for its own protection, the Society had begun deliberations in its regular twice-weekly meetings on a project for the constitution of medicine in France.[9]

While this initiative of the Society's was underway, by 1790 medical reform had become a topic of concern for the Constituent Assembly in several forums. In February 1790 it had established a committee on mendicancy (mendicité) or public assistance to examine ways of bringing an end to poverty. The organization of hospitals, especially in their capacity as poor relief institutions — or perhaps more accurately in the French context, internment of the poor institutions — and medical services, especially in the country-

8. "Adresse à L'Assemblée Nationale," in *Histoire de la Société Royale de Medecine* (1787 and 1788), p. xxxiv.

9. Plumitif de la Société Royale de Medecine, du 24 juillet 1789 au 19 août 1793 (séances 4 and 7 août 1789), MS 11 bis, Académie de Médecine, Paris.

side, were part of this group's brief.[10] Then, in September 1790, after political maneuvering, a new committee on health (salubrité) was established with medical reform as its primary agenda. On 4 October, the committee, with Joseph Guillotin as its president and Jean Gallot as secretary, began a serious investigation of the teaching and practice of medicine and all institutions relating to it.[11] In addition, reform of medical education was envisioned as part of the general reform of all education in France, a subject already under debate in the committee of public instruction.[12]

In its endeavors, the committee on health sought expert advice. Representatives of naval and military medicine and the Paris hospital reform committee of the Academy of Sciences were invited to attend meetings and delegates from the major Parisian medical institutions — namely, the Faculty of Medicine of Paris, the Royal Society of Medicine, the Royal Academy of Surgery, the College of Surgery, and the College of Pharmacy — were elected to assist.[13] Félix Vicq d'Azyr, the perpetual secretary of the Royal Society of Medicine, thus became a consulting member of the committee on health in early November 1790, and he tried out the sections on teaching of the Society's *New Plan* in this forum. Moreover, he presented a manuscript version of the *New Plan* (some 340 pages long) to the committee on 17 November 1790 and read out the table of contents. As the minutes of the committee record, the hearing of this led some members of the committee to recommend taking the *New Plan* for the "canevas," the map or guidelines, for its own work. In response Vicq d'Azyr announced that the *New Plan*'s printing was imminent and that copies would be distributed to all members. Before returning to its deliberations — the step-by-step debate of the potential clauses of its own proposals — the committee gave a vote of thanks to the Society and an assurance

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10. For the activities of the Comité de Mendicité, see Camille Bloch and Alexandre Tuetey, *Procès-verbaux et rapports du Comité de Mendicité de la Constituante, 1790–1791* (Paris: Imprimerie Nationale, 1911). For a detailed analysis of the problem of mendicancy, see Thomas M. Adams, *Bureaucrats and Beggars: French Social Policy in the Age of Enlightenment* (New York: Oxford University Press, 1990).

11. Weiner, "Le droit de l'homme à la santé," pp. 211–213; H. Ingrand, *Le Comité de Salubrité de l'Assemblée nationale constituante (1790–1791): Un essai de réforme de l'enseignement médical, des services d'hygiène, et de protection de la santé publique* (Paris, 1934).

12. Weiner, "Le droit de l'homme à la santé," pp. 212–213.

13. Procès-verbaux par séances du Comité de salubrité, AF*I23 Archives nationales, Paris.

that the committee would make use of the Society's research in the formulation of the committee's project for the National Assembly. The presentation of the printed version of the Society's *New Plan* to the committee took place on 25 November, the same day as its submission to the National Assembly at large.[14]

This calendar of events shows a parallel, if not a linkage, between the plans of the Society and the Committee on Health. Some have seen Vicq d'Azyr as masterminding the activities of the Committee on Health and its eventual project for legislation through Jean Gallot, the secretary,[15] but the evidence suggests that the situation was more complex than that. The Royal Society of Medicine, although an important source of advice to the Committee, was not the only one. Other elements and interests impinged. All the Parisian medical institutions noted above sought to make their views known, as did those from the provinces, especially Montpellier, and suggestions from individuals came flooding in. Certainly, in some senses, the Committee on Health lived up to its assurances to the Society that it would take the Society's ideas into account. Considerable overlap between the health committee's official recommendations for reform, published in August 1791 under Guillotin's name and presented to the Assembly, and those of the Society's *New Plan*, has been catalogued, thus giving weight to the thesis of the *New Plan*'s significance in the discussion on medical reorganization.[16] And Talleyrand in the part on medical education in his report on public instruction adopted the program of courses endorsed by the Society and the Committee on Health.[17] But it should be noted at this point that the immediate impact of the *New Plan* was shortlived. Although the National Assembly voted for Guillotin's project, with some amendments, the legislation could not be implemented and the dissolution of the National Assembly on 30 September 1791 left all reform plans up in the air.

As this account indicates, the appearance of the *New Plan* did take advantage of a particular opportunity. But to appreciate the nuances of the text, it is not enough to know the political context

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14. Ibid., 11 novembre 1790, 17 novembre 1790, and 25 novembre 1790.

15. Weiner, "Le droit de l'homme à la santé," pp. 214–215. Gelfand indicates his concern about Weiner's claims for Vicq d'Azyr's role in his *Professionalizing Modern Medicine*, pp. 157–158.

16. Weiner, "Le droit de l'homme à la santé," pp. 215–217; Joseph Guillotin, *Project de décret sur l'enseignement et l'exercice de l'art de guérir* (Paris: 1791).

17. Weiner, "Le droit de l'homme à la santé," p. 213.

in which the *New Plan* became public. An understanding of how the Royal Society of Medicine had become an arbiter in medical affairs is also essential.

The Society's qualifications to be a source of counsel stemmed from the eminence it had obtained in the pre-Revolutionary medical world. Its beginnings had been modest in a small commission on epidemics and epizootics but, in the 14 years since its founding in 1776, with the benefit of substantial royal and ministerial patronage, it had become a national voice on public health policy. Moreover, aspiring to the status of the long sought Academy of Medicine for France, the Society saw itself as a forum for the collection and generation of knowledge. To foster this enterprise it had established a country-wide network of correspondents who reported in on a wide variety of topics and who were the recipients and promulgators of Society-generated proposals on health management and reform. This structure had given it a national visibility and the Society had become identified as a source of progressive ideas.[18] In August 1789, when it turned its attention seriously to a project for a new medical constitution, it was the recipient of numerous reform proposals from members and correspondents and it considered the merits of the suggestions incorporated in these in formulating its own plan.

The seeming respect and attention accorded to the Society's ideas on medical reform in the early Revolutionary period do, however, mask certain realities threatening the Society's position. In late 1788 and early 1789, Vicq d'Azyr, the intellectual heart and secretarial mainstay of the enterprise, seemed at the zenith of his career. His election to the Académie Française for his literary and scientific abilities in 1788, in replacement of Buffon, was followed in February 1789 by his elevation to the distinguished court position of first physician to Queen Marie Antoinette. But events soon made these achievements problematic. The court appointment came just at the wrong time for its holder. It tied Vicq d'Azyr to the royal

18. For a general discussion of the Royal Society of Medicine, see Caroline Hannaway, "Medicine, Public Welfare, and the State in Eighteenth-Century France: The Société Royale de Médecine of Paris (1776–1793)" (Ph.D. thesis, Johns Hopkins University, 1974). See also Jean Meyer, "Une enquête de l'Académie de médecine sur les épidémies (1774– 1794)," *Annales E. S. C.*, 1966, *21*:729–749; Jean-Pierre Peter, "Une enquête de la Société royale de médecine (1774–1794): malades et maladies à la fin du XVIIIe siècle," *Annales E. S. C.*, 1967, *22*:711–751 for the attempt to use the Society's archives to develop an understanding of the patterns and prevalence of disease in eighteenth-century France.

family and to a hated figure during a period when setting distance would have been prudent and made him a figure to attack.

Moreover, it was not in a period of tranquility for academies and learned societies that work on the *New Plan* was carried out. The challenge to privileged groups in the National Assembly was now directed to these sorts of institutions, especially those with members pensioned at government expense, such as the Royal Society of Medicine. The debate of 20 August 1790 in the Assembly was in fact on the financial costs of the academies to the nation. Some deputies wanted to cut off all funding straightaway and let the learned societies subsist on private finding on the English model. But a compromise was reached in which the Assembly accepted the recommendations of its committee of finances and the academies were provisionally allowed to continue their activities for a year with government funding but had to develop new egalitarian regulations for internal governance.[19] At this time the Society of Medicine was the target of pamphlet criticism for the expenses of its correspondence network and of its practice of sending commissioners to the provinces to help control epidemics. For example, Vicq d'Azyr's recommendations of extermination of healthy cattle that had been in contact with the sick to prevent further infection in the rinderpest epidemic of the mid-1770s were ridiculed and said to have cost France three million livres.[20] Two of the Society's responsibilities, particularly, however, made it the butt of pamphleteers. These were its efforts to regulate the sources and sale of mineral waters in France and to examine and regulate the sale of new and secret remedies. The Society was accused of having developed a monopoly on the sale of mineral waters and of imposing excessive prices on these commodities, so valuable for the poor, from which its members had lined their pockets. It also came under fire for supposedly selling its approval to possessors of secret remedies and thus showing behavior similar to that of the charlatans it sought to police.[21]

Vicq d'Azyr had to move quickly to counter these charges in late August 1790 with appropriate depositions to deputies and the

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19. *Archives Parlementaires,* 1787–1799 (Paris: Dupont, 1862–1914), 42:175.

20. Noel Retz, *Exposé succinct à l'assemblée nationale, sur les facultés et sociétés de médecine,* Extrait du septième tome des *Annales de l'art de guérir* du docteur Retz, pour l'année 1791 (15 Septembre 1790) (Paris: 1791).

21. Ibid; Hannaway, "Medicine, Public Welfare, and the State," Chap. 5. Matthew Ramsey has studied in most detail the attempt to regulate secret remedies, see his *Professional and Popular Medicine in France.*

Society submitted an address and a project for regulation of new remedies to the National Assembly on 19 September as part of its plans for new internal governance. In this, the Society recapitulated the difficulties of its experiences in attempting suspension and control of remedy sellers and made the recommendation that individuals should no longer be allowed patents on remedies. Instead it proposed that worthwhile remedies should be bought by the government and their formulas made public. In this way they would become part of the pharmacopeia. These recommendations were to reappear in the section of the *New Plan* devoted to secret remedies.[22]

To turn now to the *New Plan* itself. Its authorship has been debated. Most frequently it has simply been attributed to Félix Vicq d'Azyr and his contribution was obviously major.[23] J. L. Moreau de la Sarthe, the editor of Vicq d'Azyr's collected works published in six volumes in 1805 and one of his biographers, says that although the work was presented to the National Assembly in the name of the Society as a whole, almost everywhere in it are recognizable the style and manner of Vicq d'Azyr and the philosophical direction of his ideas. And Moreau de la Sarthe does not hesitate to extract certain statements from the *New Plan* to include in his compilation demonstrating Vicq d'Azyr's medical philosophy.[24] That Vicq d'Azyr had a commitment to the progress of medical knowledge and professional and teaching reform is not open to debate. His endeavors on behalf of the Royal Society of Medicine, his expressed views on the need for changes in teaching and the introduction of clinical instruction in hospitals placed inter alia in his famous eulogies, and his editorship of the medical section of the great new Pancoucke publishing venture, the *Encyclopédie Méthodique,* all testify to his concerns. Moreover, the comment is made in the *New Plan* that the publication of Vicq d'Azyr's article "Abus" in the first volume of the latter project in 1787 served as the starting point for other reformers to take pen in hand and draw up the recommendations and projects which they communicated by the

22. *Nouveau Plan de Constitution pour la médecine en France,* reprinted in *Histoire de la Société Royale de Médecine* (1787 and 1788), pp. 1–171. All references below are to this printed version of the *New Plan.* For the comments on secret remedies, see pp. 125–132.

23. For example, Weiner, "Le droit de l'homme à la santé," pp. 215–217.

24. Jacques Louis Moreau de la Sarthe, ed., *Oeuvres de Vicq d'Azyr,* 6 vols. (Paris: 1805); Moreau de la Sarthe, "Discours sur la vie et les ouvrages de Vicq d'Azyr," vol. 1, pp. 1–88, and vol. 5, pp. 44 and 57–67.

bushel to the Society.[25] Vicq d'Azyr thus appears as a generator of reform.

But undoubtedly too, the *New Plan* is a composite work. The minutes of the Society show that a group effort went into formulating its components. Evidence that debate had occurred on a number of topics is present in the *New Plan* at several points and sometimes specific acknowledgment is made to the source of material, for instance, Chaussier on legal medicine.[26] Some members' ideas were adopted at particular junctures. Toby Gelfand has argued for the influence, or perhaps adoption, of Nicolas Chambon de Montaux's views on clinical teaching in hospitals in the relevant section of the *New Plan* on the basis of comparison of an unpublished memoir of Chambon's read to the Society in 1789 and material in the *New Plan*.[27] Further specific identifications are hindered by lack of the minutes for Society meetings in 1790 when the work was in train. But whatever the breakdown of contributions and contributors, as shall be seen, the *New Plan* reflects Society experience in numerous ways. It is cleverly crafted to achieve the Society's goals for medicine and for itself and to initiate changes in the aspects of medical life that it saw as detrimental in the old regime.

The *New Plan* comprises the following elements. At the beginning is attached a brief address to the Constituent Assembly explaining the motivation for undertaking the plan. A short introductory section outlines the chief problems with the French medical system as constituted and lists succinctly the recommendations for change the plan will make. The main body of the plan is then broken down into six sections treating respectively: 1) the teaching of medicine and everything relating to it; 2) the practice of medicine considered in its relationship to public health; 3) the police or regulation of the practice of medicine; 4) veterinary medicine; 5) ways to advance the progress of medicine by the work of an academy; and lastly 6) a summary of the different memoirs the Society had received on needed reforms. The final section of the plan is devoted to setting out the 86 clauses of the proposed consti-

25. *Nouveau Plan,* p. 162. The memoirs on reform received by the Society are listed in *Nouveau Plan,* pp. 157–170. Manuscripts for some of the memoirs are in Archivés de la Société royale de médecine, Carton 115, Académie de Médecine, Paris.

26. *Nouveau Plan,* p. 108.

27. Gelfand, "A Clinical Ideal," pp. 397–411. Chambon's memoir is in Carton 115, Archives de la Société Royale de Médecine.

tution. This is not only a plan then for the reform of the profession and teaching but also for the provision of health care to the nation. In analyzing its recommendations, it is important to keep in mind that it represents the vision of physicians.

What is notable in the *New Plan* is its emphasis on the idea of a constitution. The word occurs in the title and the concept is frequently referred to in the text. This is clearly appropriate in a submission to an Assembly debating the new constitution of France and elements of the *New Plan* for the constitution of medicine have parallels in the political scheme of things. But constitution also has resonance with the eighteenth-century notion of a medical constitution, an appreciation of which was important in understanding the factors external and internal impinging on the health of the population. Medicine in France was ailing but the *New Plan* makes the prognosis that a new internal regimen combined with the beneficial environment provided by the new political order would restore its wellbeing.

Overall the *New Plan* advocates national unity in medicine and the abolition of privilege and corporate status. The latter entailed that medicine would not have a separate internal governance but be subject to the external law of the land. Practitioners are to work together for the common good and the divisive characteristics of the *trois corps* of medicine, like those of the three estates in society in general, are to be removed by a reconstitution of the profession and its institutions. In this way, the fraternity of a new unified profession with liberty of access to its ranks would ensure an egalitarian distribution of medical care throughout the nation. This political rhetoric never far from the surface of the *New Plan* reveals this document as the product, perhaps an opportunistic one, of a particular moment in the history of the Revolution. It also reveals the unified structure of this plan whose varied elements have tended to be studied in isolation. In the balance of this paper I will discuss three aspects of the *New Plan* from this point of view.

The most referred to recommendations of the *New Plan* are its advocacy of the unification of medicine and surgery and its call for the improvement of medical teaching by clinical experience in hospitals.[28] These are integral components of the plan. Unification is called for straightaway in the subtitle, buttressed by an appeal to Hippocratic wisdom, a theme that is developed in the introduction.

28. Gelfand, "A Clinical Ideal"; Weiner, "Le droit de l'homme à la santé."

Surgery should be part of medicine. Points cited in favor of unification include the greater strength of a combined profession, the economy that would be effected in institutions for medical education and research by not needing two of everything, and the improved perception gained by the public of a profession not constantly riven by quarrels. In addition, there is the recognition that surgeons were being constantly called at the time to treat "medical" ailments in the eighteenth-century sense. They were the nation's general practitioners. Better education would enable them to provide better services.[29]

To achieve the goal of unification, the description of reformed medical education in the *New Plan* envisages the two sorts of practitioners becoming one profession by undergoing the same basic training instead of the learning in separate tracks that had up until then characterized French medicine. In the five equivalent colleges of medicine proposed for France, all students would take the same preliminary subjects: physics, chemistry, natural history, botany — in their relationship to medicine — anatomy, physiology, and materia medica. All would learn the pathology and treatment of both medical and surgical diseases and participate in clinical courses on both subjects. All would be examined on the entire curriculum and demonstrate surgical operations on cadavers as well as diagnosing and prescribing for acute and chronic ailments.[30]

Also prominent in the *New Plan* is the emphasis on the organization, manner, and extent of the clinical training that students would receive. The patient's bedside is depicted as *the* place to learn medicine and the lack of such experience is listed as one of the primary "abus" of medicine in France. The attention and detail devoted to how to organize hospitals and other institutions to facilitate clinical experience is significant. The argument is made that the welfare of patients is completely in accord with the improvement of instruction. The hospital can serve both the progress of medicine and the needs of humanity. More knowledgeable and better trained practitioners it is claimed will be better able to care for and treat patients.[31] The way to ensure this outcome is by medical control of the hospitals. This is implicit in the *New Plan* rather than stated. The dissolution of the religious orders made it possible for the *New*

29. *Nouveau Plan*, pp. 5–7.
30. Ibid., pp. 13–25, 29–35, and 41–55.
31. Ibid., pp. 62 and 75–101.

Plan to be vague on the subject of who would provide nursing care but the reference to nurses (infirmiers) states that they would carry out their duties under the direction of the medical students, whom the *New Plan* believes should be placed in charge of the day-to-day operation of the wards.[32] The students in turn were responsible to the physicians and surgeons of the hospitals. The medical hierarchy thus becomes predominant in hospital management.

The disposition of patients within the institution was also to be according to medical thinking on the nature of their diseases and their needs. This would have the dual purpose of making for greater efficiency in the service and administration of remedies but, of more import, give a real advantage in the study of diseases because the comparison of different phenomena in similar conditions would greatly advance prognosis. Suggested useful division are outlined.[33] Again, manifest here is a challenge to the way hospitals had been managed by religious orders with patients with a variety of disorders mixed together. It is also recommended generally that physicians should be part of the administrative councils running hospitals, another function largely denied them in the Ancien Régime,[34] but this is a theme not pursued in the *New Plan,* perhaps because it was part of the concerns being debated by the Comité de Mendicité.

In addition to the organization of the locales for clinical teaching, the specifications for effective clinical courses are given *in extenso*. Detailed directions for how the students in charge of the wards should draw up and maintain registers of practitioner visits and prescriptions and registers of observations are set out with, because of the Royal Society's interest in developing a disease map of France linking occurrence of maladies with topography and weather, due attention being given to meteorological conditions and epidemic constitution.[35] The order in which rounds should be carried out is spelled out minutely. Student participation in these hospital-based activities was at a premium, in following the practitioner on his rounds, taking notes, preparing remedies, undertaking lesser surgical operations under supervision, and learning anatomical details from patients who had died. Clinical courses in medicine and surgery envisage both instruction at the bedside and

32. Ibid., p. 79.
33. Ibid., pp. 80–87.
34. Ibid., p. 80.
35. Ibid., pp. 87–92.

supplementary lectures developing and extending the material covered. It is an indication of the store set in bedside teaching in hospitals that clinical teachers are literally worth their weight in gold. Their salaries were to be double those of the professors teaching the preliminary courses in the sciences accessory to medicine.[36] The concern for proper clinical teaching in medicine expressed in the *New Plan* is not novel in the sense of being a new idea but the care and attention devoted to the ramifications of it distinguished this new constitution of medicine.

In a certain way, these proposals for unification and clinical teaching are linked. They can be viewed as responses to changes in relations between the two divisions of the profession in the eighteenth century. One of the most noticeable of these in the French context was the dramatic rise in professional status of surgeons in the eighteenth century. The physicians' claimed superiority both socially and in terms of domains of medical knowledge had been challenged. The hospital had always been the surgeon's bailiwick in France, and as surgery evolved from a craft learned by apprenticeship to a profession entered by a combination of theoretical and practical training, the surgeons added courses and demonstrations to their diagnostic and therapeutic activities in such institutions. By the eve of the Revolution, the clinical teaching success of surgeons such as Desault, whose courses attracted hundreds of students, could not be ignored.[37] The recognition that medicine would benefit from a linkage with surgery has an element of the philosophy expressed in the popular adage that if you cannot beat them you should join them, and also, in the process, co-opt their most useful ideas.

The call for linkage of medicine and surgery in the *New Plan* is not considered simply in terms of promoting fraternal harmony between the two principal corps. It is also expressed in terms of the unity of knowledge required to diagnose and treat the physical body itself. The previously separate domains of knowledge and skills

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36. Ibid., pp. 87–101. The specification of the proportional salaries is on p. 26.

37. Desault's course is referred to in the plan. Ibid., p. 99. See also, Toby Gelfand, "A Confrontation over Clinical Instruction at the Hôtel-Dieu of Paris during the French Revolution," *Journal of the History of Medicine,* 1973, *28*:268–282, and Pierre A. Huard and Marie-José Imbault-Huart, "L'enseignement de la chirurgie à l'Hôtel-Dieu d'après une lettre indédite de Desault à l'Assemblée Nationale (1791)," *Revue d'Histoire des Sciences,* 1972, *25*:55–63. Gelfand's *Professionalizing Modern Medicine* is the best source on the evolution of the surgical profession in France in the eighteenth century.

claimed by the independent corps of the old order were to be shared in the new and to be merged into one unified vision of medicine. The integration of external and internal medicine would advance the progress of the subject.

The rhetoric of fraternity of the *trois corps* reached its limit with the pharmacist. While it was certainly envisaged that the new physician/surgeon (who is called *médecin* in the *New Plan*) would possess all the knowledge of the pharmacist, this, however, was not to be reciprocal. The pharmacist would only know the part of medicine relating to the art of formulating and making medicaments. And the functions of the pharmacist in compounding drugs and running his business remain subject to medical inspection and control.[38]

The rhetoric of a unified profession was also subject to a caveat. The realities of recruiting and training practitioners for the countryside as part of the nation's responsibilities to provide egalitarian medical services made two sorts of medical schools necessary. In addition to the five national colleges, there were to be a number of local departmental schools where training was to be based on a more limited selection of courses by fewer professors, concentrating on basic medical knowledge and on practical observational experience gained in local hospitals. The teaching in these departmental schools was not supposedly to be at a lower level than that provided in the five colleges. It was to be a portion of it.[39] One of the advantages promoted for the establishment of such schools was that they would offer opportunities for professors to learn how to teach and open the way for them to compete successfully in the *concours* that were to govern selection for positions in the five colleges. From its experience, the Society knew that there were distinguished practitioners in the provinces who could capably run such schools. It was also suggested that worthy student candidates from the provincial schools would be sponsored to attend one of the five *collèes*.[40] A way would be open for provincial talent to succeed in the larger world.

This description of the practically oriented medical schools of the departments glosses over certain difficulties. The major one of these is that it reintroduced, in effect, a new two-tier system of

38. *Nouveau Plan*, pp. 112–122.
39. Ibid., pp. 59–67.
40. Ibid., pp. 63–64.

practitioners. All the talk that there is a core to medicine, based on experience, that can be separated from the accessory sciences and that this is what country practitioners need the most does not disguise the fact that the frontier of medical education and ideas would be in the large towns and cities where the *collèges* were based, especially in Paris where the activities of a separate academy would lead to progress in medical knowledge. And there are elements of wishful thinking in the *New Plan*'s belief that graduates of the two sorts of school could both undergo the same qualifying examination that was to be the main requirements for entering the profession.[41]

Another indication of professional tensions in the old régime is the emphasis given in the *New Plan* to the abolition of the corporative influence in medicine. This may stem partly from the employment of a rhetoric suited to the ears of those interested in ousting vested privilege. But it also arises from genuine frustrations in medicine and a desire for change. The powers by which the extant system of faculties and colleges controlled the areas in which a physician could practice had hampered a number of careers, especially of those with degrees from faculties elsewhere wishing to practice in Paris, the medical mecca of France and the center of scientific life. Moreover, bitter and time-consuming experience informed the Society's call for the demise of medical corporations. It knew firsthand the cramping effects of entrenched medical privilege. Its commitment to the progress of medical knowledge and its quest to gain academy status had brought it into sharp conflict with the Faculty of Medicine of Paris's protection of its perceived rights to arbitrate medical matters in the capital. Although the Society had won out by gaining recognition as a learned society, it had never achieved the coveted title, nor the finance and buildings that the surgeons had managed for their Academy, and certain of its younger members including Jean Hallé and Antoine Fourcroy never gained the Faculty privileges they were due.[42]

All was to be changed in the new scheme of things. Liberty of action and freedom to choose were to be the watchwords of the new medical education and practice. How in a realistic way was this to be translated into action? Practitioners with medical degrees

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41. Ibid., pp. 53–55.

42. Hannaway, "Medicine, Public Welfare, and the State," chap. 7, discusses the Faculty-Society dispute and its effects on the careers of Vicq d'Azyr, Fourcroy, and Hallé. See also Paul Delaunay, *Le monde médical parisien au dix-huitième siècle* (Paris: Librairie Jules Rousset, 1906), chap. 9.

were to be free to practice anywhere in the nation. Setting up in a particular area was to be governed simply by inscription with the local municipal council.[43] The proposed five colleges of medicine for the country did not control practice. Nor would they possess police powers over the students beyond the walls of the college as the faculties did. They concentrated their energies on being teaching institutions.[44] New ways of doing business were to be the rule within these colleges. Neither rank nor secret maneuverings would influence the choice of professors. Knowledge and capability displayed in open competition were to be the attributes required for appointment to the teaching staff and the outcome of such competitions was to be decided by vote.[45] Such procedures applied not only to professorial appointments. Student examinations and hospital places also were to be decided by committee vote after open competition.[46] And liberty applied in the teaching itself. Professors were to be free to organize the materials in their courses in the way that they thought best (although the Society does specify what it believed was a desirable range of subjects to be included, partly it says to show the Constituent Assembly how thoroughly it had investigated the subject).[47] Nor did the teaching at the schools exclude teaching at other locales. The practices of the old regime of a range of public and private courses were in some sense to be regularized. Private courses were permitted, even at the same hours as *collège* teaching — an issue that had been a bone of contention previously, notably for both Vicq d'Azyr and Fourcroy in disputes with the Paris faculty.[48] It was said in the *New Plan* that the prospect of competition would keep professors in the college on their toes.[49] Students also gained a number of freedoms. They were free to choose which college they would attend and no fixed number of years was required to be spent in training (six was suggested with clinical training from the third to the sixth year) and no fixed regime of courses.[50] No certificates of study needed to be presented to

43. *Nouveau Plan*, pp. 104–105.
44. Ibid., pp. 27–28.
45. Ibid., pp. 35–41.
46. Ibid., pp. 45–55.
47. Ibid., pp. 25–26.
48. Ibid., pp. 26–27 and 40. It was specified, however, that the appointed professors at the colleges of medicine would be forbidden to teach private courses. Ibid., pp. 20 and 26.
49. Ibid., p. 27.
50. Ibid., pp. 41–45.

obtain degrees. Passing an examination designed to certify knowledge (savoir) was the primary hurdle in entering the profession and practice.[51]

This proposed breakup of corporate privileges also offered more. It cleared the way for planning medical institutions and services on a national scale. This suited Society interests. In such an organization of medical activities, the idea of a national medical institution devoting itself to the collection and generation of knowledge (read academy) through a web of provincial contacts, fitted eminently well. Needless to say, the Royal Society of Medicine by recapitulating its contributions over 14 years, promoted itself as the prime candidate for such a task.[52]

In the proposed new arrangement of teaching and research institutions described in the *New Plan,* certain financial realities hardly intrude, although spatial ones receive limited attention. The requirements of the new colleges for medical education in terms of amphitheaters, rooms, equipment, and collection cabinets needed are listed, but the organization of the components is left to the skills of a knowledgeable architect.[53] The only recognition of costs in setting up the new institutions is the suggestion in passing that the colleges could be more economically established if former church property was turned to a new function.[54] And reading between the lines, the extensive facilities achieved by the surgeons were to be incorporated into the Paris college for all of medicine's benefit. Similarly, for the larger encyclopedic Institute for the progress of knowledge in all areas of which the Academy of Medicine is envisaged to be a part, new buildings and costs could be minimized by a recognition that all parts of the Institute need not be placed under one roof. Existing structures such as the Louvre, the Collège du Roi, the Jardin des Plantes, and the hospitals would serve for the Parisian sections and again it is hinted could be supplemented by the use of former church property.[55] The arts of manufacturing, navigation, metallurgy, and war could all be most usefully located in provincial centers more suited to their development.[56]

The other aspect of the *New Plan* that merits further notice and the one least commented on is its concern for the inadequacies

51. Ibid., pp. 43–45.
52. Ibid., pp. 142–156.
53. Ibid., pp. 55–59.
54. Ibid., p. 59.
55. Ibid., pp. 11–13.
56. Ibid., p. 12.

of medical care and services in the countryside. What is perhaps most striking is that, in the Society's view, care should encompass not only men and women but animals as well. Physiocratic references stressing the land as the source of the country's wealth support the claims for new initiatives and veterinary medicine receives serious attention, a subject infrequently discussed in other plans.[57] But the Society's work with epizootics as well as epidemics and the involvement of leading members in teaching and research at the veterinary school at Alfort, fortified by Vicq d'Azyr's belief in the value of studying comparative anatomy and medicine, gave it an expansive view of the meaning of medical services in rural areas.[58] And it should be mentioned in passing that the clinical ideal extended to students of animal medicine as well. Just as their counterparts in human medicine learnt at the bedside, the *New Plan* stressed that the veterinary student would learn best at the side of the animal. In what clearly represents Vicq d'Azyr's view, the *New Plan* notes that both groups of students would benefit even further if medical schools and veterinary schools were located side by side.[59] The dream was to have the veterinary school from Alfort next door to the new Paris medical school.

The *New Plan* proposals to develop a more egalitarian distribution of medical services in the nation by improving medical assistance in the countryside operate on two fronts: 1) the training of suitable practitioners; 2) their distribution in the départments so that no area was bereft of care. As mentioned above, the first envisaged training a second class of practitioners, a prototype of the *officiers de santé* of the nineteenth century. It also included a call for a corps of midwives trained by courses offered by cantonal surgeons.[60] The second required the development of a national map of departments and cantons specifying the medical resources available in order to guide the designation of where practitioners should be established. Geographical area rather than density of population determined location for practice.[61] This proposal perhaps echoes in certain ways the Royal Society of Medicine's continuing effort to use a topographical approach in understanding the

57. Ibid., pp. 11–13.

58. Caroline Hannaway, "Veterinary Medicine and Rural Health Care in Pre-Revolutionary France," *Bulletin of the History of Medicine,* 1977, *51*:431–447.

59. *Nouveau Plan,* pp. 135–136.

60. Ibid., pp. 74–75.

61. Ibid., pp. 68–71.

total disease constitution of France. But in its *New Plan* form it smacks more of paper planning than concrete assessment. Difficulties relating to the educational levels of practitioner recruits, unwillingness of those in the countryside to accept medical advice from outsiders, and even problems of transport receive short shrift, but as experience would show, the establishment of practitioners with formal medical qualifications in the countryside was no simple task.

To conclude, the *New Plan* was not only a summary or a compilation of other reform schemes. It is true that it mirrors ideas promoted by others, but the Royal Society of Medicine in the *New Plan,* on the basis of its own experience, is projecting a distinctive and larger vision of how medicine in France should be. The *New Plan* was cleverly crafted to suggest significant changes in the elements of organization of the profession, teaching, practice, and distribution of medical care that it perceived as detrimental in the old regime of medicine and to develop new structures that would both affect the production of medical knowledge and realize Society ambitions to achieve Academy status. The belief was that changes were possible. The Society's hope was that its vision would prevail. The rhetoric of the plan was not designed just to pay lip service to the new order but to take positive advantage of political opportunities in the heady moments of the Revolution when a constitution was being formulated.

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Every Prospect of a Healthy Summer: The 1839 Outbreak of Yellow Fever in Charleston, South Carolina

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During the eighteenth and nineteenth centuries, yellow fever epidemics of varying degrees of severity were common in American coastal cities, particularly during the summer months. A major epidemic in Charleston, South Carolina, occurred during the summer of 1838; over 350 people died.[1] A less severe outbreak attacked the city in the following summer. A vivid eyewitness account of the 1839 yellow fever epidemic is recorded in the manuscript medical commonplace book of an anonymous physician. This recently-catalogued acquisition to the Historical Collections of the Library of the College of Physicians of Philadelphia describes the conditions and terrifying progress of the 1839 outbreak in Charleston.

The commonplace book contains medical cases, anecdotes, and information collected during the course of 1839 and sorted by subject under appropriate headings. Most entries are brief, but in the section labelled "Yellow Fever," this unnamed physician begins to keep an almost diary-like account of the origin and progress of the epidemic from 19 June, the date he first becomes aware of the outbreak, through the summer, to mid-September, when the number of cases declines. The physician's style is immediate, almost telegraphic, and painfully honest as he records his frustration in failing to keep his patients from dying, using both accepted and experimental methods. Despite the gathering strength of the epidemic and the rising number of cases, he also attempts to record the outbreak in a scientific fashion, noting observations on climate and patient history. The account closes with the physician's draft of a letter describing the yellow fever outbreak and the helplessness of physicians either to prevent or eradicate it.

Although the commonplace book, with its meticulous observations on the treatment of patients and the action of medications, stands as a useful historical document on its own, its value as

1. Joseph Ioor Waring, *A History of Medicine in South Carolina, 1825–1900* (n.p.: South Carolina Medical Association, 1967), p. 31.

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primary source material is enhanced when the volume is viewed in conjunction with other first-hand accounts. At least two contemporary printed descriptions of the 1839 Charleston epidemic exist. One of these, *A Report on the History and Causes of the Strangers or Yellow Fever,* originally an account of the epidemic delivered to Charleston's Board of Health by Thomas Y. Simons on 18 October 1839, lists 136 as the number of deaths from yellow fever, with the heaviest concentrations of mortality occurring in the months of August and September (73 and 32 deaths, respectively).[2] It is also useful to note that later accounts of the outbreak, published in the 1850s, give the number of deaths as 134, and one account cites higher numbers of deaths in July and September and fewer in August than the contemporary account.[3] These later publications also categorize the persons who died by sex, age, and race. Such statistical data provides useful background information for an examination of the commonplace book, while the manuscript records the human aspects of the epidemic.

The second contemporary account of the 1839 epidemic is even more useful, for, in attempting to isolate the cause of the disease, B. B. Strobel, in his speculative *An Essay on the Subject of Yellow Fever,* published in 1840, provides many local details, particularly of the progress of the disease among seamen aboard ships docked at Charleston.[4] This information contrasts with the cases of the disease among the inhabitants of the city which are recorded in the commonplace book. Strobel also provides some additional information on patients whose cases appear in the manuscript account. He describes one of the victims, Mr. Ladson's son, as "an amiable and estimable young gentleman . . . engaged in his father's counting house on the Southern wharf,"[5] and, in recounting the case of Mr. Bayard, Strobel names E. Geddings as one of the physicians attending the case.[6] Eli Geddings (1799–1878) was a distinguished Charleston physician, but, unfortunately, an examination of a sample of Geddings's handwriting, taken from a holograph letter preserved in a collection at the College, in comparison with

2. Thomas Y. Simons, *A Report on the History and Causes of the Strangers or Yellow Fever* (Charleston, S.C.: W. Riley, 1839), p. 14.

3. *Report of the Committee of the City Council of Charleston upon the Epidemic Yellow Fever* (Charleston, S.C.: Walker, Evans, 1859), p. 56.

4. B. B. Strobel, *An Essay on the Subject of the Yellow Fever* (Charleston, S.C.: Muir, 1840), pp. 174–183.

5. Ibid., p. 185.

6. Ibid.

that in the manuscript indicates that the commonplace book must have belonged to another physician in attendance on the Bayard case.

A transcription of the yellow fever-related entries from this anonymous commonplace book follows. The physician's handwriting is difficult, in places, impossible, to decipher, and abbreviations and contractions of both common words and medical and pharmaceutical terms are frequent. Some punctuation has been added to make the text more comprehensible.

June 19. Refer to report of the Board of Health & communication from the mayor to that board of the existence of yellow fever in our hospital[7] among seamen at this early period. The city is generally free from the disease.

The probable origin: the spring season has been remarkably pleasant, rather dry. The early part of June was also pleasant & cool. Inflammatory complaints being of frequent occurrence, catarrhs, pulmonic affections, inflammatory sore throats with & without false membranes, dysenteries. June. The weather became suddenly very warm, the thermometer ranging from 94 to 96 & 97 in some places — as high as 94 in my passage, 3 o'clock. This elevated state of the thermometer continue[d] several days when it again became pleasant with frequent showers, thunder & lightning — some very severe claps, one, in particular, so near & violent that I apprehended serious consequences. Have heard of none. The disease may have had its origin in this elevated temperature joined to the imprudent habits, sleeping in the night air, dews, etc.

June 23. The city still continues free from this disease, tho[ugh] it still progresses among the seamen.

For a good general view of the state of things in relation to the health department, refer to "Health of the City," *C[harleston] Courier,* June 24.

July 6. To this date, we have had pleasant weather, frequent showers, thunder & lightning. Healthy city, few cases of fever, & every prospect of a healthy summer.

This morning we were informed of the death of Mr. James Ladson's son, a youth of 17 y[ea]rs of age. Taken sick night of July 2nd. Complained of chills followed by fever, pains in the muscular system. Continued the next day with no apprehension of danger. Took, by the advice of his father, cream of tartar & jalap & other medicines. Physician sent for July 4. Considered a severe form of bilious congestive fever. July 5, consulting physician sent for. Considered the case something worse. There is pain upon pressing the epigastric region & over the abdomen. This morning, the fever terminates its course. Irritability of stomach ensues two hours after with the vomiting of black matter. Continues sensible until within 2 hours of his death. Muscular action very strong. Three persons can scarce

7. Probably the city's marine hospital.

keep him in bed. Becomes delirious & dies in 76 hours from the invasion. No other cases that I have heard.

July 7. Weather continues pleasant. No new cases have occurred to my knowledge. Thermometer . . . .[8]

[July] 8. Called to visit a sick gentleman, Mr. Bayard, a stranger residing at Mrs. Wildings, Broad St. Was attacked on Sunday night with slight chills, pains in various parts of the body, fever, headache. Visited him early this morning & found the symptoms described with slight suffusion of the eye. Did not consider the case alarming from its symptoms, but might be so from its circumstances, since he had only been a resident of our city 2 months & was from New York. Commenced the treatment with six gr[ain]s of cal[omel], followed by a saline cathartic. Operated well towards the evening & seemed relieved tho[ugh] the fever continued.

[July] 9. Feeling better. Had risen early & walked into the drawing room to rest upon a sofa. Fever continues tho[ugh] the symptoms are relieved. Directed powder of cal[omel] & antimon[ial] powder.

[July] 10. Fever much abated this morning. Spoke of his desire to walk into the next room. This not granted tho[ugh] was permitted to change his bed. Fever remitted considerably for six hours & returned with some increase. Complained of pain in his back, uneasiness about the thorax, & towards night, of soreness in the throat. The cal[omel] & anti[monial] powder continued with the use of a gargle. At night, symptoms are mitigated & the appearance of the patient altogether more favorable.

[July] 11. Sent for early in the morning at 4 o'clock with the request to visit Mr. B[ayard] as he complained much of his throat. Found there was much redness & ulceration. Some oppression of the thorax. No soreness of the epigastrium or abdomen. Tongue disposed to be dry; throughout the first days had been moist, broad & covered with a white fine color. Nothing peculiar. Countenance not unfavorable, but a distinct yellow tinge observable over the skin. Increased the doses of calomel & gargle. Gums appear slightly red & swollen. During the morning, his restlessness increased (which had been considerable during the night.) Desired to change his bed & in doing so was much exhausted & retched several times during the morning & at times very violently. Much of that action of the stomach as if it contained wind. A frequent belching & effort to expel wind from the stomach. At 2 o'clock, found a very decided change for the worse. Have declared to the landlady the case to be yellow fever & requested the attendance of a medical friend.

6 o'clock. Again visited the patient. Found the same symptoms continued & rather increased. Intellect becoming disordered; his speech short; tongue dry; soreness of the throat; deep breathing. Opinions decided about the fever & that the case was hopeless. Died early in the morning, having been sick 5 nights & 4 days.

Observations: No conclusions which are decided can be drawn from the weather. For a fortnight & more it had been agreeable & the nights

8. This sentence is unfinished.

cool, frequent showers, & every indication of a healthy season. Heat seems to be the immediate exciting cause of fever. With the thermometer above 90, we then anticipate yellow fever. It appeared to be excited in June by a few days of high temperature, the thermometer in that time ranging from 90 to 96 & 97.

Treatment: The inflammatory character of the disease should be kept in view from a very early stage of the disease. Begin the treatment with bloodletting from the arm. Saline cathartics. Second day, bleed again. Apply leeches to the abdomen, 2 dozen, warm poultices, gentle evacuants. Third day, apply leeches, 2 doz[en], gentle evacuants, warm poultices. Third night, a large blister. Fourth day, as governed by circumstances. This course to be pursued with modifications under all circumstances, in cases mild in the onset & in others more severe, since no inference can be drawn with certainty what will be the termination of the fever, while the inflammatory disposition is but too certain. To this course of treatment will be joined the cold bath, cold effusions, tepid bath, etc.

July 21. The cases of y[ellow] f[ever] still continue to occur. A clerk in the same house with Mr. Bayard died on the 20th & several other deaths. LeCaron.[9] Yet the weather has continued mild & pleasant. It is my firm belief that most of the cases, if not all, can be traced to some local cause & that it is located in the docks. The deepening of one of the docks back of the Exchange[10] has probably given rise to this disease.

July 23. No new cases have occurred for the last 5 days . . . .

Aug[us]t 3. George C. Moore, aged 18 y[ea]rs, native of Abbeville District,[11] been in the city but a few months, taken sick at 10 o'clock at the [Store?]. Was seen by the physician in a short time after. Treated promptly & actively. Sickened on Thursday morning & died 2 o'clock Sunday morning, 3 days & a few hours. No black vomiting.

Aug[us]t 3. Called to visit W[illia]m C. Beach, this day taken sick in the morning, about six o'clock with fever & headache. Some pain in the back. Visited him about 1/2 past ten & found the head hot; eyes red; headache; skin of the body excited; pulse frequent (120); tongue natural. Treatment: venesect 2 p[in]ts. Cold affusion to the head. Infusion of serpentaria & salts.

Afternoon. Symptoms much mitigated. The saline solution has operated actively & he has vomited one pint of bilious matter. Pulse 100; skin cooler; head relieved. Obvious remission.

Evening. Slight increase of heat, restless. No material change.

Aug[us]t 4. 2nd day. Passed a pretty easy night. Continued as left in the evening until about 4 o'clock this morning when there was some increase of heat, fever. These symptoms continued a few hours when he was relieved by one or two evacuations. Pulse when I visited him was full, about 94, strong. Skin warm; eyes suffused; some pain in the head. Bled a second

9. LeCaron is the name of the clerk.
10. A wharf in Charleston.
11. A county in the northwestern corner of South Carolina.

time to the extent of a pint. Medicine still operating. Continued the cold affusion to the head, cold drinks.

12 o'clock. Directed 18 leeches in anticipation of the symptoms which may occur, to be followed by warm fomentations. No medicine internally as the passages are small, containing mucus with serum.

6 o'clock. The leeches have been applied &, with warm fomentations, a sufficient quantity of blood has been drawn. From the appearance of his face & pulse, they would appear to have affected the circulation much. Advised the warm fomentations to be continued. The fever during the day has been moderate; heat chiefly about the head; skin of the arms & hands cool; pulse from 96 to 100; little thirst; tongue clean & natural, almost; no nausea.

10 o'clock. Warm poultices have been applied since the last visit & he has complained of faintness insomuch that they have been discontinued. Pulse is less full & voluminous, frequency the same; less heat of the head; has slept at different times. Directed 2 gr[ain]s of cal[omel] every 2 hours if fever or restlessness occurs in the night.

Aug[us]t 5. 7 o'clock. 3rd day. General appearance favorable, tho[ugh] there was much increase of heat during the night, for a short time, with restlessness. Three powders have been taken. Complains of nausea produced by them & this morning has thrown up much bilious matter with 2 or 3 bilious operations. Skin is cool; heat of head moderate; rather restless; no pain.

10 o'clock. Nausea has subsided; several operations from the bowels; bilious appearance.

2 o'clock. As before. Applied a large blister over the epigastrium.

6 o'clock. Blister produces so much irritation advised its removal. Fever moderate; pulse between 80 & 90.

10 o'clock. Blister has drawn well & there is but little apparent disturbance in the system. Advised rest, to be kept quiet.

Aug[us]t 6. 7 o'clock. 4th day. Rested tolerably until one o'clock. Afterwards, fever increased with some delirium for a short time. Restless; thirst urgent; skin very hot. At the time I visited him, these symptoms had much subsided & he appeared calm & quiet as before, the system exhibiting no unusual disturbance. Bowels had been moved during the night & expected another motion. Abdomen a little tympanitic. The countenance is clear & the expression lively. Pulse 84, full.

10 o'clock. The symptoms exhibited little alteration during the day. About 1/2 gill[12] of blood was discharged from his nostrils. Twelve leeches were ordered to the temples; but six have taken. No medicine directed as he has had several small operations during the day & they appear to be bilious.

Aug[us]t 7. Was called upon early this morning with the information that my patient had passed a very restless night with a great deal of pain

12. A gill is equivalent to 4 fluid ounces.

in the lower part of the abdomen. Upon calling to visit him, found the bladder much distended — strangury in consequence of the blister having occurred. Relieved by the use of the catheter. The abdomen then was found to be tympanitic. Left the patient relieved & in a few hours found it necessary again to use the catheter, followed by the infusion of serpent[aria] & salts, which was well borne on the stomach & operated several times.

Afternoon. No unpleasant symptoms except occasional delirium.

Aug[us]t 8. Rested quietly during the night. Little sleep.

11 o'clock. The continuance of the delirium being considered unfavorable, requested the advice & assistance of Dr. Holbrook[13] who visited him this day in consultation. Six leeches applied [to the] temple. Confirmed the general views taken of his disease & regarded the delirium. Directed cal[omel], James' powder[14] & rhubarb during the day, which operated 2 or 3 times. Delirium continues the prominent symptom.

[August] 9. Delirium continues. No sleep for 2 nights & days; occasionally a 10 minutes' doze.

Afternoon. Some blood apparent in one of the stools, very offensive & of a darkish color. The passages have continued bloody. The urine is occasionally suppressed. The delirium continues, tho[ugh] not of a raving character & [the patient] is obedient to any directions given to him.

[August] 10. Passages continue bloody & very copious, 10 or 12 evacuations during the night. Black matter discharged by stool. Powers are declining.

Evening. Symptoms the same; more delirious. Do not expect that he can survive the night. Directed brandy.

10 [o'clock?]. Still alive. Operations bloody & in large quantity. Directed a solution of chloride of soda & brandy, half & half. Died.

Thus with great regret I record the failure of our efforts in this case. Every precaution was taken & every care in the faithful fulfillment of the directions observed, yet notwithstanding delirium & sleeplessness succeeded with bloody evacuations. The stomach was controuled by the measures taken, but the large intestines appear to have been affected & from then the bloody discharges [went forward?]

Determined to pursue another course. To bleed as usual but to abandon the saline cathartics & employ the mercurial combined with rhubarb from the beginning & to use them with proper intermissions during the disease, either as evacuants &, if need be, to the extent of salivation. Five cases have been treated after this manner, & I think are likely to recover.

Two other cases treated after this plan & both died. The alterative impression was produced by the cal[omel] in one case. None in the other. These cases are worthy of notice.

Sept[ember] 3. The 1st was a Mr. Lebby's son, between eight & nine y[ea]rs of age, of slender make, pale complexion. Had resided in Charleston

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13. Probably John Edwards Holbrook (1794–1871), M.D. University of Pennsylvania, 1818.

14. Another name for antimonial powder.

all his life. Exposed to all weather. Running in the sun without hat. No particular care observed, yet died on the 4th day, discharging a great quantity of black matter as dark as ink.

The other, a young man of 21 y[ea]rs & 4 mo[nths], born in Charleston, brought up in Georgetown. For the last six y[ea]rs has been apprenticed to a carpenter & worked steadily at his trade. Exposed necessarily to all the inclemence of the weather. The habit of this person was spare; sallow; tall in figure; muscular system rather relaxed; yet died on the fourth day with delirium of 36 hours' duration & some dark discharges from the stomach.

The treatment in both instances has been bloodletting; mercurial cathartics carried to the extent of touching the gums; sponging; blistering. Thus you see the fever is no longer exclusive in its attacks, [assaulting?] the native born after the age of 18 y[ea]rs, which was supposed to be the time required for acclimation.

Deaths from yellow fever, 1839: Mr. Bayard, Mr. Beach, Mrs. Greery, Mr. Lebby's son, Mr. L. Laval.

Copy of a letter to Rev. W[illia]m Wallace. Sept[ember] 19.

I have much pleasure in informing you that the yellow fever has abated[15] very considerably, almost disappeared, I may say. Other febrile affections exist, but they are not of a nature to excite apprehension, very readily yielding to treatment & subsiding in the course of a few days. At the present time, I may say, the miasmatic matter giving rise to yellow fever has run out, become diluted, or its sources dried up. For it is as extraordinary for the disease to subside in September, as it was unprecedented to appear in June. The very dry weather with its coolness has brought about these changes & tho[ugh] the first is destruction to our crops, yet health is more valuable. The present febrile affections may be only a modification of the yellow fever virus, &, but the causes mentioned, may have resulted in an epidemic as destructive as in New Orleans, Mobile, & Augusta. Subjects there are & nothing but the operation of a powerful modifying agent or agents could have put a stop to a disease always more fatal & [continuous?] at this season.

The community may rely with much confidence upon the reports of the Board of Health. They have at an early period of the disease & at the present time exhibited a diligence in discovering & reporting cases, which causes them to be considered alarmists, but which was probably the true course to pursue.

The number of cases proving fatal compared with those which recover . . . .[16]

When circumstances strongly predispose, arising out of the condition of the individual or the exciting causes, the character of the complaint will always partake of a malignant nature, & it will be violent in some part or other. If the stomach escapes, the head will be affected or the large intes-

15. The word "subsided" is crossed out here.
16. This sentence is unfinished.

tines, or it may become typhus, so that tho[ugh] it is natural to boast & to flatter ourselves that we can do a great deal, I still think that when the individual is strongly predisposed or the exciting causes intense, our remedies tho[ugh] they may modify & lessen the symptoms, cannot alter the character of the disease. Its destructive tendencies will be exhibited, & it will fall with violence upon some of the parts mentioned, & its effects upon those parts will often be as peculiar & destructive as that of smallpox upon the skin, erysipelas in some cases, carbuncle, etc.

As we cannot say with certainty what is the condition of the individual or of the strength of the virus to which he has been exposed, we ply our remedies with as much zeal as if we were certain of success, & I must say that the practice in these cases is very much improved, & sometimes we are surprised at the fortunate issue. Such, however, is the insidious character of the disease that it behooves us to be cautious & express no very dec[ide]d prognosis of the result, in all cases approaching the treatment with fear & trembling.

The mortality has been less than in former years, & consequently a comparison of the disease with former y[ea]rs would be much in favor of the comparative virulence of yellow fever this year with other years.

Sept[ember] 21. Death of Col. Blandings after 3 days' illness. Upon the above subject it is difficult to decide, but if we take any one symptom of a malignant character & fatal tendency & from its early appearance determine upon the virulence of the disease, I may say that the yellow fever has been more severe this year than in preceding y[ea]rs.

For instance, the matter of black vomit has appeared in the stools of a patient in whose case I was called in consultation 12 hours after the invasion of the disease.

In the son of Mrs. T. Grimke, it was discharged from the stomach 36 hours . . . . [17]

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17. This sentence is unfinished.

Making It

JOHN McCLENAHAN

Mahmoud, an only son, died early one morning at Abu el Namrus, a village on the west bank of the Nile a few kilometers south of Cairo. Through a relationship not clear to me, my parents knew his family and Mother took me along when she called to tell them of our sorrow. To reach Namrus, a sprawl of mud huts under a lavender sky, our driver crossed the Giza bridge, turned south from the Pyramid Road, and drove over a wind blasted and boulder strewn road. A girl, naked and leading a goat, pointed the way.

The boy lay coccooned in a shroud of gray muslin on a makeshift bier. He was five years of age. His expression was tranquil and the camel bite, unspeakably septic, of his left shoulder that had brought him down, was invisible. Flies converged in wheel spokes at the corners of his mouth and coins lay over his eyes, half-piastre pieces with perforated centers. While we chatted, fat-tailed sheep wandered in and out of the hut and a rooster pecked at the dung-flaked earthen floor. The air was heavy with, for me, a new odor, sweet and menacing. Mother consoled the family, praying as they stood, arms folded across their chests. Mahmoud's father and uncles then laid him in a coffin and covered the open top with a ragged pall. They hoisted the box shoulder high by its end poles and trudged down the street to the ululations of a single mourner casting dust on her head.

I saw no other corpse until I stood beside one many years later, laid out under oilcloth in the dissecting room of medical school. It was a broad, sunny, well ventilated laboratory on the second floor behind a sign declaring the place not open to the public. I had dreaded the encounter, but as it happened I felt nothing more than a sense of curiosity and satisfaction for the world of secrets that had been opened to me that morning with a hundred-odd other First Year students. In long white coats, clutching the gospel of anatomy according to Gray and Spalteholtz, we were welcomed by a Hungarian embryologist. "All of us here know how to laugh," he said, "but the spirit is deadly serious."

Deadly elsewhere, perhaps, but not in the morgue. Our spirits were genial, the conversation lively, in each of us sympathy ap-

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proaching admiration for the unclaimed John and Jane Does — prisoners, maniacs, whores — lying quietly before us. We gave them names, of course, such as Roscoe and Evangeline. We talked to them, clucking delight and frustration on the long mornings as we traced nerve trunks, foraminas, and fascial planes. At noon, after a splash of glycerinated formalin, we covered their faces with damp rags and went to lunch.

I arrived at that place rather by chance. I had done well in college but in the wrong subjects, revelling in Chaucer and Childe Harold, then, after a late decision, crammed most of my premedical requirements into my senior year. I performed poorly in chemistry, a discipline for me of progressive incomprehensibility, and in the end I was fortunate to graduate at all. Professor Cowgill, an authority on polymers, summed up the matter very well. "I've given you a 60, the passing grade, along with my best wishes for a Merry Christmas."

Commendations such as this attracted little enthusiasm at medical schools. Philadelphia turned me down by return mail. Boston nibbled, beguiled, apparently, by my inexplicably high competence in the Medical Aptitude Test, and invited me to stop for interviews. These numbered three. The first, predictably, was with a chemist, a charmer, who poured me coffee and inquired about the Mamelukes. I left his office elated. Then a surgeon, a devotee of skiing, of which I knew nothing. I left his office dejected. Finally the Dean received me, pensively. A few days later he wrote telling me of his deep regret.

When I reported these results to my older brother, a successful practitioner, he declared them a hell of a note and called on Dr. William Pepper, Dean of Medicine at the University of Pennsylvania. He claimed no special consideration, he said, but only hoped to find out what had gone wrong. Was there any hope? Could I reapply in another year? Pepper looked at him with surprise. "Are you telling me that we turned down your brother?" "Yes." "Well, then tell him he can come." As simple as that. No tiresome review by an admissions committee. No percentile hocus-pocus. No conditions. A simple agreement between gentlemen.

I would always wonder whom I had replaced, the unlucky candidate without a successful brother. Was he one of the minority quota, a woman or a Jew? What happened to him or her? Was he accepted elsewhere, as I earnestly hoped? This, of all times, was the time to make it, to get ahead, moved by the press of intense

competition, sentiments of elitism, and a persuasion that success hung on diplomas from the best academy, the best college, the most illustrious medical school. To take one's place, be it as a WASP, a nondescript, or a "hen medic," a term regularly bestowed with a little smile.

For a year I lived in a world of facts. Perhaps five thousand, laid out on tables, blackboards, and in heavy books. They were, for the most part, isolated, in no discernible pattern like dots on a Pointilliste painting. A formidable display — gobbets independently afloat — osmosis, chronaxie, amylase, Henderson-Hasselbach, zwitterions, prophase, decerebrate rigidity. Every lecturer marched to a different drum, firing salvos of information. I can recall not one that ever began with, "Today I am going to tell you about _____ because . . . . "

My cadaver, the biggest fact of all, gave opportunity for private speculation. We sat, scalpels in hand, exploring a machine so remarkable, so intricate, trying to deduce history from its hallmarks — scars, tattoos, and mutilations. Was this man a wino (shrunken liver)? A ditch digger (heavy pectorals)? A prize fighter (depressed fracture of the left zygoma)? How many questions! How many names to remember!

Remember them we did, all but 10 or 15 colleagues who were dropped in June. Survivors thanked their retentive memories and hoary mnemonics, couched in nonsense. The code for the bones of the wrist: "Never lower Tillie's pants, mother might come home." The essential amino acids: "Lewd fellows try valentine method; is arc light history through?"

At some pain, animals taught us. Untenured Fidos, cats, and rabbits, supine preparations laid out by dinars. Perhaps, even for the unperturbable, there was anguish in the sight of a turtle's heart twitching on a string and mongrels, wide eyed, throats agape, spreadeagled on planks. Necessary, necessary, everyone agreed, but would the lessons have been as memorable on motion pictures? To remember was it necessary to feel?

Facts took meaning in autopsy rooms where we drew connections between life and formulas, between test tubes and glomeruli, huddling at post-mortems trying not to breathe and viewing sad relics, often paradoxical. Hope persevering for years in a jungle of cancer; a livid child with one small grape lodged in his windpipe; unspeakable violence inflicted by mere fists.

Clinicians, many of them gifted teachers, now offered clues to meaning. They were no longer quizmasters but friends, guides. I was touched by their humor, frequently astringent, and by their curiosity. One, an avid hunter, on observing a quail drop half a second before he fired his gun, performed an autopsy on the spot and documented a ruptured heart, burst during the bird's frantic rise. A somber pathologist, hounded out of Nazi Germany, bending over a tray of fresh specimens. He addressed Paul, my classmate. "Doctor, would you be good enough to identify and describe that organ?" "Yes sir. Here we have a heart _____." "Poetically speaking, perhaps, but it happens to be a *ooterus*."

Some instructors failed at the lectern, diffident or overbearing; some pontificated, clutching their lapels. Good ones radiated style and honesty. An obstetrician, dainty and fastidious, captivated his students with chalk drawings of a foetus, worthy of Matisse, "our little friend" on its way down the birth canal. We made rounds on surgical wards with a surgeon out of Carolina, day and night with a pink rose in his lapel and jaunty as a mockingbird. "Son," he said to me across an operating table, "please take that retractor off my finger 'fore I send you home to your ma."

From orderlies and laboratory aides came precious nuggets of information. How to smoke a recording drum. How to lay on a bandage and guide a catheter. Mulligan, a keeper of the morgue, was a treasure of folk pathology. Slight, reptilian, he hobbled about in a rubber apron, shunning gloves or a surgical mask, immune, apparently, after years of exposure to every distemper. He relied strictly on touch, smell, color, and heft, identifying typhoid by its odor and rickets by the beading of a rib. With eyes closed he could distinguish a nephrotic kidney from a nephritic by the sound it made when dropped on marble.

Nurses never knew our debt to them. We never told them. Hospital beds were filled with charity patients who paid little or nothing for their care, and for the most part nurses gave it tenderly. They came from Lancaster farms, the coal tips of Mauch Chunk, and high school marching bands in Ohio — few of them black, few out of college, most with parents who skimped to pay their tuition. They were pretty in their crisp blue uniforms and skirts cut to the knee. They were nimble and adroit. From the beginning they knew more of pain and equanimity than we, cocksure in our short white jackets. Many learned healing at home, taking care of younger siblings and grandparents. Here, they told us with their eyes, are

the signals of resignation; there, terror and hysteria; and around the corner, down the hall, the hallelujah cry of birth labor fulfilled.

Under the eye of a world-renowned dermatologist we explored syphilis, up to his researches an unmentionable disease. Handsome and autocratic, with the bearing of a Prussian major, he strode into his amphitheater precisely on time at the head of a retinue of assistants, peering up at us through rimless glasses, then at his seating diagram, then raising a finger, and pointing at *me*.

"What factors, Mr. McClenahan, determine the distribution of the dermatoses?"

"Er . . . clothing."

"I'll accept that. An example."

"If you wear shorts in the summer the mosquitoes will bite your knees."

"*Admirable*."

As he fired questions around the room, the floor of the amphitheater was a tableau out of Hieronymus Bosch. Three patients lay on litters covered by sheets, each telling a student their troubles while two others tried to examine them, peering at throats, backs, bellies, and genitals. A gong sounded. Everyone changed places, new pit crews took over with no break in the inquisition.

"Doctor, cite a non-sexual route of syphilitic infection."

"Dirty toilet seats."

"Ingenious but mythical. The ecclesiastical route. No! Next time your answer will be 'congenital.' And next week, sir, a second cup of coffee at breakfast."

In wards close by the city sheltered its ailing indigents, the maimed, and the consumptive, and in one monstrous pavilion, a colony of the neurologically afflicted, a museum of paretics, tremulous alcoholics, flailing spastics, and in an adjacent wing behind locked doors, convoys of the demented awaited transfer to asylums. Here a celebrated psychiatrist held his clinic on Saturday mornings. Whatever the torments he must have witnessed, his manner was ever urbane, composed. He fenced with dementia, rage, and delusion undismayed, never at a loss for words, unclasping his pince-nez, polishing the lenses, and continuing as he would in conversation with a friend. "Now where were we a moment ago?"

In the early days of World War II he presented David, a 20-year-old schizoid, pale, stooped in a faded blue wrapper and felt slippers, escorted by three attendants. He stood facing us, defiant, arms akimbo.

The professor said, "Would you tell these doctors how you came to be here?"

"You mean, why they took me away?"

"Yes. Can you explain?"

"Very easily. I tried to kill my brother."

"Did you have reason to?"

"I've explained it many times but no one believes me. I planned it for a long time. He was evil. He knocked up my mother. He has terrible thoughts. I waited a long time and then I got the signal to go ahead."

"Can you describe the signal?"

"Yes. It was a picture of the setting sun on the cover of the *Saturday Evening Post*."

"Please continue."

"That was all there was to it. The police came and stopped me. They knocked me down and took my gun. They brought me here and locked me up."

"These doctors are interested in what you've told them. Is there anything else you'd like to add?"

"Yes. For reasons real to me I tried to kill a man. You may or may not be able to understand that. O.K. But for just trying I've been locked up and my freedom taken away from me."

His eyes swept the gallery. "Do you know what that means? I may never go home. They're going to give electric shocks to my brain. O.K. But every day in this country thousands of men my age are being trained, equipped, and paid by the army and navy to go out and kill people they don't even know all over the world. Who's crazy around here?"

The doctor said, "Thank you, David."

Now we approached bedsides, talking to patients and touching. Surgeons in the making were permitted to operate on anyone willing to submit to a circumcision, a ripe boil, a wen. Persuasion brought sweet rewards, a chance to hold a knife. Everywhere we took glimpses at last of disease emerging naked and ugly from the mere words of sick men and women. How many surprises! Our early certainty of the line between sick and well gave way to perplexity, stemming from so simple a question as "When did your trouble begin?" Fear did so much to tongues. Was it possible for anyone to sit for two hours on a hard bench and give coherent answers to the following questions:

What's the matter?

Do any of your neighbors burn batteries?

Have you noticed any recent changes in your hat size?

Do you enjoy satisfactory sex relationships?

What's the matter? Oh, my God, doctor, where do I begin?

I know what you mean. Why not just tell me where it hurts?

Some stories poured out too soon, copious, rehearsed. Reticence occasionally — perhaps it was *our* job to figure out the trouble; some people hide their complaint like a snake in a basket, waiting for a doctor to charm it out. In others, fearing that they were to be judged rather than comforted, anxiety masqueraded as stoicism. When I asked a watchmaker, staring at his stiff fingers, when his trouble began his wife blurted, "He's coming down with arthritis, just like his father did." How easy to enjoy sickness! "No one ever paid me this much attention before." A few, wearing a wrong diagnosis around their necks like an albatross, had to be *undiagnosed* before recovery could begin. Medical schools required knowledge of French or German, but these I never needed. What would have been useful would have been a little understanding of folklore, taboos, a smattering of Italian, and a grasp of English ambiguity. There are innocent words ("gland") that carry startling connotations. "Bladder" is a no-no with the masses; "I've been having some trouble with my gall." Others, unaccountably, are regularly used in the plural: "corsets," "ulcers," and "appendix." "Has your appendix been removed?" "No, I still have them." How many beers is a "couple?" "Virus" long ago fled the laboratory and took root in the vernacular. "When I had that virus the pains in my neck were fierce."

When old people drift away from clocks and calendars their knees begin to ache a week before Lucy's birthday; they fall the day before Jack was here. Frivolous questions addressed to them bring surprising answers. When a feisty widow with a failing heart was asked her hobbies she replied, "Going to the funerals of doctors who gave me six months to live."

From the start I admired children as teachers. Their thinking is clearer than ours, less cluttered and, until they have been taught differently, more honest. They reject eyewash. Often, when asking them questions I wished their parents down a well. While Mom gushed, Dad, vigilant, supplied Junior's name the instant I asked it,

then smothered me with irrelevance while the clock ticked on. There were disturbing silences, on the contrary, when questions bore upon bruises suffered but no one knew of any injury . . . .

In spite of reticence, a child's story was always worth waiting for. With luck it could be caught when he or she was young enough, tired, and momentarily isolated. It might be succinct, like Tom's: "I just can't push it out." Saucy: "My name is Robert McAdam and my father is Samuel P. McAdam and Co." Or Claire's blithe malapropism: "I didn't sleep last night; I had an earwake."

A bosomy spinster, Miss Pringle, taught us the practicalities of child bearing. Speak gently, she said, and never hurry. Tie the cord, hold the child close, and let it feel your arms. Through the night while we played bridge in the back room, she read *True Romances* and then, abruptly, put down her magazine, cocked an ear, and hurried to the labor room. Returning, she stood at the door and winked. "I think you'd better come along now."

I looked forward for months to my first baby, swaddling her in fantasy before we ever met. It would be a girl and would be called Josephine — the title currently at the top of the Hit Parade. I would remember her birthday, and when she married she would introduce me to her groom and say, "I want you to meet the doctor who brought me into the world."

When the time came I sat with Mrs. M., a dishwasher's wife with a brood of seven. A healthy pink girl was born easily and cried before her hips had been delivered. I counted her toes, fingers, apertures, and ran my finger down her spine. Then I showed her to her mother. Mrs. M. closed her eyes and turned. "Oh my God!," she said, "take that thing away."

When examinations were over, farewells said, and the intern selection committees content with their choices we put on gowns, green hoods, and joined the academic procession. We waved and threw kisses with three thousand other Bachelors, Masters, Lawyers, and Philosophers. A politician told us to go forth and serve. While the others sat, we stood and swore by Apollo, then we burst out into the sunshine, stripping the ribbon off our new diplomas.

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Books Recently Received for Review by *Transactions & Studies of the College of Physicians of Philadelphia*

Dolores L. Burke, *Physicians in the Academic Marketplace* (Westport, Conn.: Greenwood Press, 1992).

Larry L. Burkhart, *The Good Fight: Medicine in Colonial Pennsylvania* (New York: Garland Publishing, 1989).

Paul F. Cranefield, *Science and Empire: East Coast Fever in Rhodesia and the Transval* (New York: Cambridge University Press, 1991).

Waltraud Ernst, *Mad Tales from the Raj: The European Insane in British India, 1800–1858* (London: Routledge, Chapman & Hall, 1991).

John Farley, *Bilharzia: A History of Imperial Tropical Medicine* (Cambridge: Cambridge University Press, 1991).

Jacques Gélis, *History of Childbirth* (Boston, Mass.: Northeastern University Press, 1991).

Sander Gilman, *The Jew's Body* (New York: Routledge, Chapman & Hall, 1991).

Christopher Hoolihan, compiler, *An Annotated Catalog of the Miner Yellow Fever Collection* (Rochester, N.Y.: University of Rochester Medical Center, 1990).

Claudia Kren, *Alchemy in Europe* (New York: Garland Publishing, 1991).

Samuel J. Rogal, compiler, *Medicine in Great Britain from the Restoration to the Nineteenth Century, 1660–1800: An Annotated Bibliography* (Westport, Conn.: Greenwood Press, 1992).

Lola Romanucci-Ross, Daniel E. Moerman, and Lawrence R. Tancredi, eds., *The Anthropology of Medicine: From Culture to Method,* 2nd edition (New York: Bergin & Garvey, 1991).

Kerr L. White, *Healing the Schism: Epidemiology, Medicine, and the Public's Health* (New York: Springer-Verlag, 1991).

John Wiltshire, *Samuel Johnson in the Medical World: The Doctor and the Patient* (Cambridge: Cambridge University Press, 1991).

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Reviews

WILLIAM H. HELFAND. *The Picture of Health: Images of Medicine and Pharmacy from the William H. Helfand Collection.* 141 pp. Philadelphia, Pa.: University of Pennsylvania Press, 1991. Price $39.95.

Reviewed by CYNTHIA R. SLACK

In the sponsor's statement for William H. Helfand's *The Picture of Health: Images of Medicine and Pharmacy from the William H. Helfand Collection,* P. Roy Vagelos stated that this catalogue and the corresponding exhibition at the Philadelphia Museum of Art were sponsored by Merck & Co., Inc. in honor of its centennial. The celebratory aspect of this book, however, goes far beyond its corporate sponsorship. *The Picture of Health* celebrates political satire, popular culture, and advertising strategies. But, most of all, *The Picture of Health* celebrates the joy of collecting through William H. Helfand's assortment of medical and pharmaceutical prints, posters, and ephemera.

In his preface, Helfand explains how the purchase of a few prints in the 1950s led to a lifetime of collecting prints, posters, and other popular images relating to medical and pharmaceutical subjects. One of the most intriguing aspects of his collection is the eclectic range of artists and popular images he acquired. Included in *The Picture of Health* are excellent reproductions of prints by such renowned artists as Thomas Rowlandson, Honoré Daumier, and James Gillray, as well as American and European trade cards and posters featuring "pin-up girls" for the past century or so. The "Bright's Kidney Beans" trade card, for example, from the late nineteenth century, portrays a luscious and provocative beauty reclining on a clam shell. The profusion of beautiful young women represented on both the trade cards and the posters reminds us that sex appeal has been long recognized as an effective marketing tool.

While the images themselves document the fascinating range of the popular hopes and fears invested in the powers of physicians and medicines, Helfand's commentaries provide insights on the historical and artistic context in which they were produced. Additionally, *The Picture of Health* includes three useful essays by Patricia Eckert Boyer, Judith Wechsler, and Maurice Rickards. Wechsler's

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essay is particularly enlightening for the modern American reader in its discussion and explanation of pre-twentieth-century European political satire. Wechsler points out that much of the humor in caricature stems from the use of opposition. As a comic type, the physician was particularly effective in political satire in his capacity "as the 'healer' who harms" (p. 56). For example, in George Cruikshank's "Radical Quacks giving a New Constitution to John Bull!" (Plate 45) political reformers are portrayed as physicians who, through bleeding, amputation, and other attempted remedies, are more effective at destroying than saving their patients.

Other images simply poke fun at doctors and pharmacist. One of the most delightful caricatures is the "Singular Effects of the Universal Vegetable Pills in a Green Grocer! A Fact!" (Plate 61). In this print, C. J. Grant portrays the fantastic consequence of a man who was caught in the rain after taking 132 boxes of vegetable pills. Carrots sprout from his fingers and the back of his head. Leeks burst from his forehead like two horns, and turnips erupt on his arms like boils. There is an infectious, almost Dickensian, good humor in this parody of the excessive claims of some products.

Finally, *The Picture of Health* provides a delightful and sometimes sobering retrospective of the changing issues in medicine and popular culture. For example, while *The Picture of Health* illustrates the continued use of posters for fund raising and public education, AIDS has replaced tuberculosis or syphilis as the targeted enemy in the battle for good health. Above all, however, *The Picture of Health* is a convincing testimonial to the personal and public benefits of a life of collecting.

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MARY F. WACK. *Lovesickness in the Middle Ages: The Viaticum and Its Commentaries*. 265 pp. Philadelphia, Pa.: University of Pennsylvania Press, 1990. Price $37.95.

Reviewed by FAYE M. GETZ

The subject of lovesickness — that queasy, weak-kneed feeling that could bring the sufferer close to death — is well-known to devotees of medieval romantic literature. That it caught the attention of

medieval physicians too is less studied. Mary Wack's book *Lovesickness in the Middle Ages: The Viaticum and Its Commentaries,* traces the phenomenon of lovesickness from ancient Greek medicine through the later Middle Ages. She also presents editions and translations of a part of the *Viaticum* of Constantine the African, and several commentaries on it, by Gerard of Berry, Giles, Peter of Spain, and Bona Fortuna. Over 40 illustrations augment the text.

The reader might imagine, as Wack herself did at first, that lovesickness would be a disease whose time had passed, an affliction of former ages and not our own. Such was not the case. As soon as Wack's work became known, she was inundated not only by people interested in the disease, but by those claiming to be suffering from it. The afflicted volunteered to aid the author in her research, and she was even asked to act as an expert witness. Wack obviously has chosen to write about a topic of current, as well as historical interest.

Lovesickness, in the Middle Ages at least, was a disease of the aristocracy, more specifically, of aristocratic men. Sufferers surrounded themselves not only with sympathetic friends, but with university-educated physicians as well, whose musings on the subject are the basis of the texts Wack edits and translates. For lovesickness was not a "mental" illness alone, but a complex disruption of the humors akin to melancholia.

Wack sees this curious and enduring phenomenon as more than the medieval equivalent of "yuppie flu." She uses it to reveal the cultural construction of disease. Issues of gender, sexuality, and concepts of the body are explored with great thoroughness. Also examined is the meaning of medical learning in medieval culture, a topic all too often neglected by experts in the field. Revealed by Wack's imaginative researches is an understanding of disease very different from our own. The importance of regimen, the specificity of certain ills to classes and genders, the relationship of the sufferer to the healer, all these issues are touched on in a way medical historians and students of medieval literature alike will find enlightening and useful.

The publishers are to be congratulated for printing such thorough editions and translations of Latin texts. *Lovesickness in the Middle Ages* will be incorporated eagerly into a number of types of curricula, and one hopes more authors will be tempted by Wack's successful efforts to follow her lead. Even so, it is a great pity

that Wack's extensive notes, many of which are explanatory, were presented in the "scientific" style, and not placed at the foot of each page.

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MICHAEL R. McVAUGH and NANCY SIRAISI, eds. *Renaissance Medical Learning: Evolution of a Tradition*. 234 pp. Philadelphia, Pa.: University of Pennsylvania Press, 1990. Price $20.00.

Reviewed by YNEZ VIOLÉ O'NEILL

When, in 1855, Jules Michelet coined the word "renaissance" to describe an advent, beautiful and bright, a rupture with tradition, the negation of everything medieval, the rediscovery of the world and of man, he hardly could have imagined the diverse epochs to which his conceit would be applied. Burkhardt elaborated Michelet's theme in his study of fifteenth- and sixteenth-century Italian cultural history, maintaining that the Renaissance was the surging of a new age, the springboard of the modern world, while Haskins used the term to characterize the interest in Arab texts and the cultivation of Latin learning which he found flourishing in European centers of learning as early as the first decades of the twelfth century.

According to its editors Michael McVaugh and Nancy Siraisi, *Renaissance Medical Learning: Evolution of a Tradition* comprises "a long renaissance," a process that evolved over four hundred years resulting in the formulation of modern medicine. Nine accomplished studies in the field of medieval and early modern medicine are offered in support of this thesis. All are written by recognized experts — Bylebyl, Jordan, McVaugh, Garcia-Ballester, Ferre, Feliu, Crisciani, Jacquart, Siraisi, Durling, and Nutton — and each represents the specific interests of the individual scholar.

These topics are explored meticulously. Ranging chronologically from Bylebyl's study of the development of the word *physica* from the fifth century B.C. to 1159, when John of Salisbury completed his *Metalogicon,* to Nutton's re-examination of Fracastoro's theory on the origins and reception of contagion, the essays focus mainly on developments in Southern France, Spain, and Italy from

the fourteenth through the sixteenth centuries. In their prefactory remarks, the editors mention the rise of medical faculties within the new universities of Bologna, Paris, and Montpellier, but with the exception of Crisciani's brief account of innovations introduced by Italian and French surgeons from about 1260 to 1363, scant attention is paid to other thirteenth-century medical accomplishments.

Of particular value for future researchers are the versions of texts included in this anthology. In his short study of Girolamo Mercuriale's *De modo studendi,* Durling provides both the Latin text and an English version of the sixteenth-century professor's lecture on medical study. The Spanish team of scholars, examining the use some Jewish physicians made of Latin medical learning, supply English translations and the Hebrew texts of five prologues composed by those Jewish practitioners to introduce their Hebrew versions of Latin medical writings.

Though appreciative of the editors' efforts in assembling these excellent and highly individual studies, one must question their decision to group them under the "renaissance" rubric. The development of medical practice and theory in Western Europe from the twelfth through the sixteenth century was not a rebirth. Such a term implies recapitulation. Rather, the renovation of the medical edifice outlined in these pages was a transmutation of the classical legacy and its transformation into an essentially new phenomenon. As in Henri de Mondeville's metaphor for that edifice (cited by Crisciani on p. 139) it was a question of a pre-existing house being altered, repaired, improved, and re-designed, not of an antique soul being "born again."

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CLAUDIO MILANESI. *Mort apparente, mort imparfaite: Médecine et mentalités au XVIIIe siècle.* 268 pp. Paris: Payot, 1991. Price FF 165.

Reviewed by OREST RANUM

First appearing as an almost inarticulate reflection in the sixteenth century, the fear of being buried alive would become quite common,

and reach a crescendo in attitudes toward death and dying in the late eighteenth and early nineteenth century. From this very important and well established fact as a point of departure, Claudio Milanesi in *Mort apparente, mort imparfaite: Médecine et mentalités au XVIIIe siècle* explores the ensemble of issues in what can be called the Enlightenment way of death.

The prevalent notion of the time of death in the late Middle Ages and early modern centuries was the moment when the soul left the body. This obviously theological, rather than medical notion, would slowly be displaced by a more distinctly medical emphasis on observing the signs of death. Careful observation of the signs of life and death became a final part of medical science under the rubric of *apparent death*. Antique medical knowledge was, as might be expected, carefully studied again in order to recover which signs of death the ancients believed to be the most certain. Philosophical debate about matter, and about the body and soul also played a part in the creation of a medical definition of death. Such pioneering figures as Buffon in physiology were synthesizing ancient concepts and new observations to create "systems" for understanding the whole process of aging and death by the mid eighteenth century.

In *Mort apparente,* Milanesi narrates the cultural disjuncture which occurred between those who followed the traditional, theological definition of death, and the medical partisans who stressed the signs of death, by focusing on the literature about being buried alive. The rise of the medical definition, and of the medicalization of life in general, left increasing numbers of persons in genuine anguish about being buried alive. The medical definitions of apparent death were set in a scientific mode, resulting in only relatively absolute certainty about death. Fascination with cases reported about individuals who survived burial became widespread both in the "popular" and scientific press of the eighteenth century. Clauses were included in wills ordering attending surgeons to stick pins in the feet before burial, or use some other procedure, to ensure that death had been complete.

Jean-Jacques Bruhier's and Jacques Bénigne Winslow's learned treatises on the signs of apparent death conformed to the mores of scientific publication in the eighteenth century, and each would have many editions. Yet at the heart of these works, and of Bruhier's in particular, were brief narrative histories of persons who had survived after being buried alive, or of evidence of persons attempting to free themselves, from their coffins, and failing, after burial. The

evidence of scratches on the coffin lid seems to have had a particular fascination for eighteenth-century readers. Milanesi is correct to stop his analysis of apparent death in order to puzzle over the historical and epistemological characteristics of these stories about being buried alive. Recounted, elaborated, repeated, collected, these stories have the ring of ethnographic truth to them, yet they are obviously legends and fantasies. How did such evidence come to be integrated into scientific work on signs of death? Milanesi honestly concludes that these stories simply do not square with the "rise of modern science" view of the Enlightenment.

There has been a lot of research in recent years on the epistemological status of the ethnographic story as recounted by learned persons in the eighteenth century (see the recent work on J.-B. Thiers) but no scholar has yet been able to integrate this story material into that grand historical construct, the rationalist and scientific movement known as the Enlightenment. To do so is not unlike the task future historians will have in integrating Shere Hite's ethnographic information into the history of scientific studies of sexuality in the twentieth century.

There is no doubt that in a rationalizing age readers continued to be fascinated by stories of people who had survived their own burial. At only one, brief moment does Milanesi allude to the possibility that these stories about surviving burial *might* have explicit parallels with the death, burial, and resurrection of Christ. For Milanesi this implied critique of Christianity may have seemed too literalist, too heavy, or simply too crude to be taken seriously, but in the cultural halfway house between the profane and the secular known as the Enlightenment, the implication to be drawn was that Christ's death was only apparent, and that he had survived his own burial. The ethnographic story is always multi-valent.

As debate and research about the signs of apparent death continued, the strongest conclusion that came to the fore left putrefaction as the most certain sign of death. The scientific results on putrefaction prompted physicians (and government officials, particularly in some parts of Germany) to recommend a delay of three days, at least, before burial, or until the signs of bodily decay were clearly evident. Why three days? Milanesi's approach does not permit him to reach toward a broader cultural history perspective. What he refers to as the theological definition of death (when the soul leaves the body) was in fact a complex of notions about time, corruptibility, and incorruptibility, including, of course, saintliness.

Were Bruhier's and Winslow's readers familiar with that most convincing of all signs of saintliness, the incorruptibility of the body? That profoundly cultural sign of sanctity — the sweet odor emanating from the saint's body — would not, of course, appear in instances of death of ordinary sinners. But the scientific recommendation to delay burial for three days may reveal just how difficult it is for historians to delimit the boundary between the religious and the secular in the eighteenth century.

As might be expected, the recommendation of a three-day delay for burial conflicted completely with another aspect of Enlightenment medicine, that is the campaign to eliminate all the sources of bad air and dangerous odors in houses and cities. Keeping a body around for three days in tight living quarters risked infecting a whole household, yet burial before the delay, according to the latest medical knowledge, increased the risk of a person being buried alive. As a result of the latest medical research on the signs of death and on the dangers of bad air, which prompted diametrically opposite reforms in the eighteenth century, the rise of the funeral "home" and the extension of the practice of embalming (urban elites first) were not far in the future.

Where Milanesi is at his most refreshing, and also his most anachronistic, is in his interpretation of how scientific knowledge was approved of by academies in the eighteenth century. He is constantly surprised by the *imprimatur* given by academies to scientific publications which had more of the character of quaint nonsense than anything else. Here is at work a rather mechanical and positivist model of understanding the relations between scientific and academic activity in the eighteenth century. First a *sociabilité,* and then a movement constructing its own tower of Babel, the scientific academies of the eighteenth century encouraged researchers to go forward in the moral and medical sciences, not always knowing where the claims of observation might take them.

In the magnificent Mozart-Salieri opera *Don Giovanni,* still another ethnographic story takes on heightened meaning as a result of Milanesi's research. The Commandatore's death is an illustration of how individuals may articulate two quite distinct cultural "systems" without expressing awareness of their implications. Don Giovanni is the first to observe that the soul of the man he has just run through with a sword is departing his body. Then the dying man says so as well, after which his daughter, Donna Anna, arrives in anguish. After noting almost scientifically that she is "seeing," Anna

observed the blood, the wound, the absence of breath, and cold limbs of her dead father — a recitative of the apparent signs of death. In just two minutes Mozart and Salieri provide remarkable ethnographic testimony for Milanesi's work, that is, of the two worlds of theology and Enlightenment as they confronted each other in the eighteenth century.

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ERNEST COTCHIN. *The Royal Veterinary College, London: A Bicentenary History.* 211 pp. Buckingham, England: Barracuda Group, 1991. Price P25.00.

Reviewed by PHILIP TEIGEN

Viable veterinary schools were established in the United States and Canada in the 1860s. The formally-trained veterinarians practicing in North America before that time received their education in Europe, and when professional veterinary education did begin on this continent, European-trained immigrants started it, among them Andrew Smith at the Toronto Veterinary College, Alexander Liautard at the New York College of Veterinary Surgeons, and Duncan McEachran at the Montreal Veterinary College. Consequently, histories of the European veterinary schools that produced so many and such important nineteenth-century veterinarians are of interest to historians of veterinary medicine on this side of the Atlantic.

Unfortunately, Ernest Cotchin's *The Royal Veterinary College, London: A Bicentenary History* does not contribute much understanding to the history of veterinary education. Although the word history appears in its title, the work is more a collection of biographical miscellanies arranged in chronological order than a history of the Royal Veterinary College (RVC). Cotchin, an emeritus professor at the RVC, did make a conscious decision to approach the College's history biographically. "I have divided the chapters in a way reminiscent of the old histories of the Kings of England, and I often refer to the 'reign' of a particular Principal. This biographical approach has its weaknesses, but it is one that an amateur often finds easy to handle" (p. 10).

However, the problem with this history results not so much from weaknesses inherent in the biological approach as in the *substitution* of biography for history. All the chapters except the first (on the founding of the RVC) are about important professors or Principals of the College. Within the chapters the author is preoccupied with personal rather than institutional developments. In those chapters that do take up some institutional topics, the discussions are fragmented and unconnected to other chapters. For example, in the chapters dealing with the years 1888–1927, a period of curricular upheaval in most veterinary schools, Cotchin has two unconnected paragraphs on the RVC curriculum, one about an 1890 report (p. 110) and the other about an 1896 inaugural lecture (p. 124). They give no indication of what comprised the curriculum nor what changes it underwent. Likewise the admission of women students. We learn that they were denied admission in 1894, although there was no regulation excluding them (p. 113), and we next hear about this practice when women began to be admitted in 1928 (p. 146). The two events are isolated, unconnected by narrative so that readers are left without any explanation as to why women were denied admission in the first place and why they were suddenly admitted near the end of the 1920s.

Finally, much of the biographical detail is marginal to both the history of the College and the portraits of the individual men. For example, we are told that students of Thomas Brown, while he was a professor at the Royal Agricultural College, gave him a silver tankard (p. 109); that the RVC gave William Pritchard a gift of a large silver teapot (p. 112); that the horse Hermit, whose skeleton was given to the College in 1890, had been bred by Mr. Blenkiron in 1864 (p. 112); and that the son of Charles Spooner (a professor from 1853 to 1871) fought in Egypt and Afghanistan, where he "was mentioned in despatches" (p. 77). What has happened, it appears, is that facts were accumulated rather than selected with a coherent structure in mind and that this prevented the writing of a narrative account of the College's first two centuries.

Biographical approaches to veterinary history are common. For example, in his history of the University of Pennsylvania veterinary school, *A Legacy and a Promise* (1984), John Martin provides a wealth of information about faculty, lists all of the school's graduates, and even organizes some, but not all, of its chapters around the terms of the school's deans. Nonetheless, the work remains a history because the biographical information complements non-

biographical topics and fits into an overall account of the school's evolution. Likewise, Leon Saunders takes a biographical approach when writing the history of veterinary pathology. But it is through the biographical material Saunders presents that the emergence of the discipline becomes clear. There is no doubt that what he is writing is the history of a scientific discipline.

In both Martin's and Saunders's work, history is approached biographically but it is not *reduced* to biography, as is the case with *The Royal Veterinary College*. Consequently, we have lost an opportunity to learn about one of the oldest veterinary colleges in the world, its changing curriculum, and such important topics as the admission of women, the relation of science to veterinary practice, the complicated relations between the RVC and the Royal College of Veterinary Surgeons (the British credentialing agency), and the ties between the RVC and the royal family. (The royals are pictured frequently in the book. Furthermore, Prince Philip is Patron of the College and the Queen Mother is Patron of the Royal Veterinary College Animal Care Trust and Fellow of the College.)

Although the work fails as history, it succeeds handsomely as a book: it is full of illustrations — maps, photographs, and engravings — superbly reproduced in color and black and white. These document the history of the RVC in interesting and revealing ways. The design and printing of the book also are excellent.

While British veterinary schools are much older than those in the United States and Canada and were, in fact, progenitors to schools founded here, they are far behind their offspring in exploring their history. Neither this history of the RVC nor that of any other British veterinary school can match the sophistication of Eugene Gattinger's volume on the Ontario Veterinary College or Ellis Pierson Leonard's two-volume history of the New York State Veterinary College at Cornell. The need remains for histories of veterinary education in England and Scotland. When they are written, they will enrich our understanding of European veterinary history and that of nineteenth-century North America as well.

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SAMUEL H. PRESTON and MICHAEL R. HAINES. *Fatal Years: Child Mortality in Late Nineteenth-Century America.* 272 pp. Princeton, N.J.: Princeton University Press, 1991. Price $37.50.

Reviewed by NANCY TOMES

Fatal Years: Child Mortality in Late Nineteenth-Century America presents a provocative, ambitious argument about the causes of child mortality in turn-of-the century America. Samuel Preston and Michael Haines, respectively a professor of demography and sociology at the University of Pennsylvania and a professor of economics at Colgate University, base their conclusions on previously unanalyzed data from the 1900 census, which included two questions that were asked of all married women: how many children had they borne, and how many were still alive at the time of the census. Using a sample of over 100,000 respondents, Preston and Haines employed multivariate statistical analysis to determine how mortality rates differed according to variables such as class, race, and place of residence.

Preston and Haines's findings challenge some widely held assumptions about the nature of child mortality in this period. In the first place, they found that as of 1900, the rates of child mortality were still very high: 18 percent of all children died before the age of five, most commonly due to gastrointestinal and respiratory infections. Black children had much higher rates of mortality than white children, which Preston and Haines attribute to the "degraded social and economic circumstances of blacks" (p. 210). Surprisingly, among white families, the best predictors of high death rates were not the parents' social class and level of education, but rather place of residence.

Evaluating the medical theories and public health measures available in the late nineteenth century, Preston and Haines conclude that the existing state of scientific practice offered very little protection to families living in large cities. They note that the children of doctors had a death rate only 6 percent less than the national average. No matter how motivated to preserve their children's health, parents "remained in the grip of natural forces." They conclude, "Larger cities had higher child mortality in the late nineteenth century, despite having administrative structures that facilitated the introduction of public-health measures. People furthest from the reach of the modern state — and furthest from one another — enjoyed the best health conditions" (p. 210).

Preston and Haines find little evidence to suggest that improved diet reduced mortality rates in the twentieth century, an argument often associated with Thomas McKeown. Their research demonstrates that, in spite of being comparatively well fed, Americans in 1900 still had extremely high rates of child mortality. They conclude that "child mortality was high in the United States in the late nineteenth century not because parents neglected their children or because resources were severely limited. Mortality was high simply because people lacked the know-how to reduce it" (p. xxi).

Fatal Years makes considerable demands on the reader. The book begins with a general overview, followed by four highly technical chapters examining the census data in great detail. While the authors are careful to summarize and interpret their findings in straightforward English, much of their argument depends on statistical analyses that are difficult for the non-specialist to assess. Readers who have no background in demography or multivariate analysis may find the book difficult to follow. But the effort is well worth it. Preston and Haines present a wealth of new information concerning the experience of disease and death at the turn-of-the-century. Historians of medicine and public health will find much to interest them in this valuable monograph.

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DAVID ROSNER and GERALD MARKOWITZ. *Deadly Dust: Silicosis and the Politics of Occupational Disease in Twentieth-Century America.* 221 pp. Princeton, N.J.: Princeton University Press, 1991. Price $29.95.

Reviewed by NORMAN GEVITZ

Silicosis is a lung disease produced when a person inhales silica dust which is the major component of sand, quartz, and granite. Although it has become an all but forgotten disease in the United States today, for the first half of the twentieth century silicosis was perhaps the most important occupational illness in terms of delineating the positions and roles of industry, labor, and government in defining such diseases and how the problems associated with them should be resolved.

In *Deadly Dust: Silicosis and the Politics of Occupational Disease in Twentieth-Century America,* David Rosner and Gerald Markowitz examine the history of silicosis from a broad social and cultural perspective. They explore the political, technological, scientific, and economic forces that shaped the incidence, prevalence, and understanding of the disease, and look at the debate over the social construction of the illness.

One of the chief virtues of their work is the authors' ability to look dispassionately at each of the major actors in the struggle and give a fully dimensional portrait of their beliefs, actions, and motivations. Mine and foundry owners could easily have been portrayed as villains, but instead Rosner and Markowitz look beyond such characterizations to understand the foundations for the owners' behavior. The owners were clearly slow in admitting to a problem in the first place, seeking to blame the victims by arguing that the high rates of lung disease amongst their workers were due to poor personal hygiene. However, as they were faced with significant statistical findings, the pressure of insurance carriers, labor unrest, as well as medical evidence, many mine operators, particularly the larger ones, reacted by introducing dust-reducing technologies to the work place while seeking to limit their liabilities. Later, in the mid-1930s, as they became increasingly afraid of government regulation, companies with a continuing silica problem established the Air Hygiene Foundation. This furthered research into the prevention of the disease while it successfully worked to define silicosis in a way that benefitted the interests of its mine owner members.

The workers, of course, were the chief beneficiaries of reduced silica in the workplace, but organized labor's role in the struggle to achieve this was mixed. Though their ideological position over workers' safety was both forward-looking and internally consistent, when it came to a choice between jobs and health, unions more often than not bowed to industrial demands, particularly during the Great Depression. On the other hand, the most militant unions which successfully fought for better standards were doomed after World War II due both to their resistance to signing anti-Communist affidavits mandated by the Taft-Hartley Act and to the reduction of mining operations in their geographical area.

Despite the Roosevelt Administration's considerable interest in the working conditions of the dangerous trades through its Secretary of Labor, Frances Perkins, its performance in enacting protective legislation was disappointing. While publicizing poor

conditions, and urging the need for standards, industry was largely successful at avoiding federal regulation. Part of the reason may well be industry's arguments that self-regulation had worked and that the problem of silicosis was much overplayed were successful. It may well have also been a matter of timing. The Administration, afraid of losing jobs in the midst of the Depression and later not wishing to interfere with industrial productivity as the nation geared up for war, did not view workers' health and safety as a pressing concern. Indeed, as the authors point out, it would not be until the late 1960s that the issue of occupational health and safety would return to public attention.

Rosner and Markowitz have produced an excellent volume. It is well-researched, well-written, and well-argued. It joins a small, but growing number of distinguished books on the history of occupational diseases in America. I look forward to a paperback edition of the work so it may be used as a text for courses in the history of public health.

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HUGH C. HENDRIE and CAMILLE LLOYD, eds. *Educating Competent and Humane Physicians.* 223 pp. Bloomington, Ind.: Indiana University Press, 1990. Price $29.95.

Reviewed by ROBERT M. KAISER

The noble sentiment that physicians should be both knowledgeable about the complexities of medicine and attentive to the individual emotional needs of their patients has been so often repeated as to seem a cliché. Nevertheless, the perceived dichotomy between technical competence and human sensitivity is one that persists, and it is one of the major problems that medical educators perennially attempt to solve. In their collection of essays, *Educating Competent and Humane Physicians,* psychiatrists Hugh C. Hendrie and Camille Lloyd have assembled the varied opinions of a group of academicians who indict the current state of medical education in the United States. Unfortunately, although the authors in this anthology successfully define the inadequacies of the medical education system, they fail to provide any convincing solutions.

An easily discernible logic shapes these essays, and it is as follows. From their very first day of school, medical students are assailed with an intimidating, voluminous array of facts. The process of learning rewards passive assimilation of information rather than careful reasoning and integration of important concepts. Conforming to a scientific ideal that reduces all diseases to specific entities and mechanisms, the medical canon is constructed in a way that discourages speculation about any socially-based origins of illness. This reductionist outlook compels medical students to see disease as a mechanistic, biological process important intellectually in its own right and to neglect the individual patient who is experiencing it. Upon graduation, medical students enter the hospital as residents. Not yet full-fledged physicians, they must rapidly master clinical skills, learn to deal with the proximity and emotional turmoil of deathly ill and dying patients, and function under the strain of grueling work hours, high expectations, and often sparse and unsatisfactory supervision. Not all newly-trained doctors emerge from their training with their humanistic qualities intact, and their lack of humanity can be traced directly to the philosophically myopic, oppressive aspects of the system of medical education. In order to produce humane doctors, the inhumane system must be changed, or so it is argued.

The American Association of Medical Colleges officially called for medical education reform when it issued its much-quoted report, *The General Professional Education of the Physician,* in 1984. *Educating Competent and Humane Physicians* is a direct descendant of that report and contains a number of prescriptive remedies from a representative cross section of physicians and educators: psychiatrists, psychologists, pediatricians, internists, family practitioners, and administrators. Nearly every one of these academicians agrees that the medical school curriculum needs the following revisions: instruction in better communication skills, problem-based learning to assure intellectual stimulation of students and better correlation between the basic sciences and clinical medicine, early exposure to patient care, improvement in faculty teaching, and a more formalized support system for residents during their stressful years of training. These are indeed worthy reforms, and they have been instituted, with much fanfare, at some American medical schools in the 1980s; perhaps the most widely known program, although it is not the first, is the new pathway program at Harvard Medical School.

Most of the essays suffer from a fallacious assumption: that formulating and adopting a new curriculum necessarily produces better and more humanistic doctors. Problem-based learning may indeed be less onerous and more intellectually stimulating than an endless schedule of lectures, but this may be beside the point. The success of any medical school curriculum is still measured by student scores on certifying examinations administered by the National Board of Medical Examiners, an examination that, in the past, has emphasized mastery of medical detail rather than medical reasoning and which in many ways undermines the curricular reforms which have achieved such broad consensus. Instituting additional support for residents is also worthwhile, but the reality of long and busy work weeks is not likely to end soon, despite the recently instituted reforms in New York prompted by the infamous Libby Zion case. Residency programs that overtax the physical, mental, and emotional capacity of young doctors-in-training, despite the addition of support systems, are still in the end dehumanizing.

This anthology lacks adequate integration and proper focus and falls victim to underzealous editing. The first three essays — which deal with facts in medical education, psychosomatic illness, and psychiatry in medicine — are irrelevant and could rightfully have been excluded. Although the other essays advance solutions that are not especially startling, two in particular are well-written and worth reading: a review essay on the history of innovations in medical education and a socio-historical analysis of medical education by the eminent sociologist Renée Fox. Ultimately, any meaningful reforms in medical education must explicitly state how much each doctor should know and how hard physicians should work during their years of training. Apart from conflicting educational philosophies, there are extremely powerful and intractable sociological and economic realities that prevent real reform from succeeding: namely, the view of medical school and residency as rites-of-passage and the use of medical students and residents as valuable, inexpensive labor for academic hospitals. Any altruistic intentions to create a more humanistic medical profession will fail unless these factors are acknowledged and addressed.

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DAVID B. MORRIS. *The Culture of Pain.* 375 pp. Berkeley, Calif.: University of California Press, 1991. Price $29.95.

Reviewed by JOHN A. ENCANDELA

Our understanding of pain has been dominated by the medical profession since the late 1880s. Consequently, pain has come to be perceived, more or less, as a sensation associated with real or potential tissue damage leading to electro-chemical disturbances along neurological pathways. Beyond this explanation, there has been a notion that emotional pain exists, but with little relationship to physical sensation.

In *The Culture of Pain,* David Morris asserts that the separability of emotional from physical pain is a myth. Current research both inside and outside of medicine, he claims, suggests that this "rigid split" may be "a gigantic cultural mistake" that has led to shortsighted treatment and, sometimes, unnecessary suffering by individuals confronting chronic pain (p. 12). His mission is to integrate medical and non-medical voices in order to support and extend the emergent changes in current thinking about pain.

Morris draws from a long history of ideas from sources as disparate as Plato and Steve Martin, and covers a number of topics, including the political, sexual, comic, tragic, and sometimes "useful" dimensions of pain. Blending an array of images, he shows how history offers "almost unlimited examples to illustrate that pain is not just a biological fact but an experience in search of an interpretation" (p. 38), and that it has been only in the last hundred years that pain has been stripped of its cultural and personal significance. He challenges us to recognize forces, such as gender, social class, religion, and individual psychological states, which bear on the experience of pain and provide a variety of meanings for the sufferer. Moreover, he suggests that emotional and physical pain need not be experienced separately, but may exist in relationship along a continuum.

The Culture of Pain joins Elaine Scarry's *The Body in Pain* (1985) in effectively challenging the boundary that has separated notions of physical and psychological suffering. Morris's only shortcoming occurs in his treatment of emotional and physical pain as opposite ends of a single continuum. Though commendable as a construct that attempts to integrate categories, it may oversimplify the experience of pain and, ironically, foster dual conceptualizations of suffering (i.e., at its extremes, pain is either totally emotional or

altogether physical). I envision emotional and physical pain as distinct strands, braided together into a single pain experience.

Finally, a warning for those who like traditional order: Morris writes in a post-modern style that some may find distracting. (Imagine treatments of Freud, Aristophanes, and Ginger Rogers in the same paragraph!) But the resulting complexity of ideas and form becomes a metaphor for the way in which Morris invites us to think about pain, and, therefore, is quite effective. His work culminates in suggestions for new research and guidelines for the medical treatment of pain, which correspond with the conception of pain as a complex entity. These recommendations, as well as his entire discussion, are worthy of consideration.

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JUDITH A. OVERMIER. *The History of Biology: A Selected, Annotated Bibliography.* 140 pp. New York: Garland Publishing, 1989. Price $20.00.

Reviewed by DONNA C. MEHOS

The History of Biology: A Selected, Annotated Bibliography, by Judith Overmier, is a contribution to the Bibliographies of the History of Science and Technology series published by Garland under the editorship of Robert Multhauf and Ellen Wells. It covers biology from the eighteenth through the mid twentieth centuries and draws from publications before 1985. Overmier compiled her bibliography "as an introductory level reference tool aimed at students, at faculty crossing into a new research area, and at the libraries to whom novices in the field turn to for assistance" (p. ix). In my view, this volume will be of limited use to these novices. Furthermore, it will not aid those trained in the history of biology and medicine, despite the editors' intention that it also serve amateur and professional historians (p. vii). Unfortunately, Overmier did not follow the suggestion of the series' editors to write an introductory essay on " 'the state of the field' " (p. vii) which might have been useful for historians as well as clarified her strategy for selection of entries. Her avoidance of entries on medical history — because they are

indexed elsewhere (p. ix) — weakens subject areas where the historical relation between biology and medicine cannot be ignored. Those interested in a reference tool for current scholarship should turn instead to *Isis: A Critical Bibliography* (although not selective, it represents better the scholarship of trained historians), or other reference tools that Overmier describes (pp. xiii–xvii).

Overmier made peculiar decisions in the organization she devised for the bibliography. This slim volume consists of 619 references listed under 36 headings; no sub-headings are used. The relative scope and breadth of any individual subject, therefore, is not reflected in the table of contents. General topics such as "Biology" (24 entries) are included alongside specific topics such as "Mycology" (one entry). Overmier claims to represent biological disciplines although, she admits, their shifting boundaries make her subject arrangements problematic (p. x). Thus we find separate categories for "Heredity," "Eugenics," "Genetics," "Population Genetics," and "Molecular Biology," but only one general category of 101 entries for "Evolution." The last-named subject would be more useful if broken down under sub-headings, while the two entries for "Eugenics" could easily be incorporated into another topic such as "Genetics" or "Heredity" where we also find eugenics-focused studies. More important, Overmier obscures historical relations between disciplines by representing them as distinct. Histories of eighteenth- and nineteenth-century biology are therefore listed awkwardly within a classification scheme reflecting twentieth-century disciplines.

Given the challenge and difficulty of selecting a limited number of entries, some of Overmier's decisions on what to include nevertheless baffle me. Take, for example, the subject of "Biochemistry." Why do we find six articles by Robert E. Kohler but not his important book *From Medical Chemistry to Biochemistry* (1982)? This omission suggests either that Overmier found Kohler's early studies on the history of specific concepts more valuable than his book-length contribution which analyzes institutional factors crucial to the rise of biochemistry, or that his book fell into the category of a medical topic. In the "Microbiology" section, Overmier includes two volumes of reprinted classic papers and two popular accounts of major developments in the discipline but omits such major contributions as *The Genesis and Development of a Scientific Fact* by Ludwik Fleck (1979) and Paul de Kruif's internationally famous and popular *The Microbe Hunters*. A last example of her puzzling

choices is found in the entries under "Natural History": three of the twenty-six are on the relatively obscure Spanish naturalist Felix de Azara while not one entry is about Darwin! (There are, of course, many entries about Darwin, but they fall under "Evolution" or under the disciplinary classification Overmier imposed on Darwin scholarship.) These examples illustrate the type of problems that can be found throughout the bibliography.

When Overmier states that "[S]cientists continue to write most history of biology" (p. xi), she discloses a bias apparent in the volume. She over-represents the uncritical, and often outdated, histories written by scientists (whose work rarely steers the reader to other useful sources) while she underestimates the scholarship of trained historians. Overmier's omissions of major contributions in the history of biology as well as her puzzling inclusion of obscure, and outdated sources detracts considerably from this book's value as a reference tool. This volume may mislead the novice and frustrate the experienced scholar.

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EXAMPLES

William H. Helfand, *Medicine and Pharmacy in American Political Prints* (Madison, Wis.: American Institute of the History of Pharmacy, 1967), p. 35.

Helfand, *Medicine and Pharmacy*, p. 51.

Ibid., p. 60.

Wendy Shadwell, "Britannia in Distress," *American Book Collector*, 1986, 7:1.

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